

POST AND PLANK

-from forest to finalized building system

Semester: Autumn 2024

Teachers in char

David Rios, Associate professor, artist

Cecilie Andersson, Associate professor, architect

Trond Oalann, Associate professor, traditional carpentry

Other teachers; Espen Folgerø, Associate professor, architect, Kim Christensen, engineer, Axel Weller, traditional carpenter



Course Content:

In this course, we aim to develop and explore a resource-efficient building system that starts with the forest and the log, working collaboratively with the industry to propose a flexible, collaborative concept where the dimensions and the utilization of the entire log become important. We will initiate different phases within the course where we theoretically will map existing systems and historical references. We will understand the premise of the productive forest, the harvesters, the sawmills, the procedures of cutting, drying, planing, principles of fire protection, insulation, microclimatic conditions, and attachment to the site.

With that as a backbone, we will work towards a more sustainable logic of wooden building within and beyond the existing industrial structures.

Site and locality will play an important role in this course as it intends to focus on the use of local regional materials for the building systems.

Through critical reading, we will examine the premises of the wooden industry today, the shortcomings conventional massive wood principles provide, and inquire how we can create a backdrop for better utilization of forest resources, with heightened awareness of the landscape, the actors, and the principles of building and the built.

Learning Outcome: Skills, Knowledge, Competencies

We will investigate the logic of sustainability through existing building systems, focusing on forest resources, the wood industry, on-site placement, and the building process. Visiting stakeholders and sites will enable us to gain insight into construction mechanisms. Critical reflection will be fostered towards the ongoing field of practice to establish alternative models and systems. Throughout the course, we will encounter various professions and practitioners, while also understanding the culture and systems surrounding locally sourced materials in relation to construction.

The course will emphasize precision skills in drawing, projecting, and building. We aim to achieve a resolution of 1:1 in both drawing and building details to explore the development of a building system. Sessions with Axel Weller, an expert in antiquarian drawing, as well as with engineers and wood technicians, will be conducted. Additionally, we will utilize the school's sawmill and machinery, along with professional workshops, to understand the possibilities within production lines.

We will cultivate awareness of the holistic mindset that addresses the forest, site, building materials, building process, and spatial and tactile qualities.

Working and Learning Activities:

The Narrow Streams / The Big River (De små bekkene / Den store elven)

The semester will consist of two phases. The first phase, The Narrow Streams, will last for the first six weeks. It will be filled with seminars, invited speakers, and short, intense workshops where students will work in various groups. This phase will include an introduction seminar, workshops on forestry and its relations to landscape, workshops on elements and joints, architectural systems, wooden properties, and chemical by-products.

We will visit forests and sawmills in Osterøy, Granvin and Voss, near Bergen, to meet stakeholders of forestry and the wooden industry, as well as to explore unique forests and wooden architecture. Other study trips will be suggested and planned together with the students as the course progresses

The second phase, The Big River, will consist of longer periods of work towards a final design solution. It will involve full-scale mock-ups and formulation of the system design, culminating in a final project proposal after initial workshops on spatial quality, spatial flexibility, and agents of

transformation. This phase will include both individual work and collaboration in pairs, groups, and as a whole class.

Requirements:

In this master course we will work in small groups/pair for a large part of the semester. Also we will welcome guest speakers to school and go for visits to experience the production line on our own and it is therefore crucial with participation and presence at school during the semester.

The presented work of all the workshops and deliveries for both phases will ground the evaluation of passing the course.

In the final work we will build onto a shared logic developed by the class and taking part in the general discussion in the class to pull the proposal forward as a group, becomes essential for a good shared result. For the final work students will be able to work individual or in small groups, exploring details and potentials of building system.

Specific conditions:

A master course is considered a formal exam at BAS. The only grading is Pass /Fail.

An external examiner will be present during the final review, and participate on the final grading of the student in collaboration with the teacher(s) in charge on the course.

If a student lacks the minimum level and attendance in order to be evaluated for the exam, the student shall receive written notice of this as soon as possible, and at the latest 2 weeks before the final review. Then this student will have failed the course. As a master course is based on the effort and work during a whole semester, this will be the basis for the approval for the exam.

Written notice/warning can be given throughout the semester if a candidate does not have the required progress or attendance. Then it is the student's responsibility to put in the extra effort and resources. Even though a student does not receive a warning/notice from the teachers, the final result will be depending on an evaluation also by an external assessor, and the result can therefore not be guaranteed.

If a student has special needs and will need facilitation during the master course, the student must contact BAS before the course starts and inform the school about this. It is required to have documentation of a diagnosis in order to have facilitation. If you have had a process with this earlier in your study, you nevertheless have to contact Adm. to inform and agree upon the specific needs for facilitation for the upcoming semester.

The final assessment

Will be made by the teacher(s) in charge of the course plus an external examiner during the final review, and will be based on:

1. The individual submission for the different stages of the project.

2. The level of participation and contribution to the collective/group work.
3. The assessment of the work/project as presented at the final review.

After the final review one will receive either a pass or fail. If there are minor weaknesses that could improve the project in order to pass, a candidate may be given supplementary work that is to be completed within 2 weeks after the final review. The supplementary work will be evaluated to either a pass or a fail by the teacher(s) in charge. If the weaknesses are not possible to overcome by doing supplementary work, the grade will be fail. This decision of giving supplementary work is solely up to the teacher and the external examiner.

Specific requirements for design and build courses:

For design and build courses it is very important that the student participates on the collective work, as well reflect on one's own effort and learning outcome.

The final decision as to the performance of each student will be taken by the external examiner (sensor) on the basis of both group performance, the report on individual participation done by the teachers, and a portfolio made by the student showing the extent of individual and collective contributions to the studio.

Portfolio

A student is expected to make a portfolio of all 3 master courses before diploma. This is to be submitted at the beginning of the diploma semester.