POST AND PLANK
-from forest to finalized building system

Semester: Spring 2023
Teachers in charge:
Trond Oalann, associate professor, traditional carpentry
David Rios, associate professor, artist
Cecilie Andersson, associate professor, architect

Course Content:

In this course we want to **develop and explore a resource efficient building system** that starts with the forest and the log and works together with the industry to suggest a flexible, collaborative self-build concept where the dimensions and the utilizing of the entire log becomes important. We will initiate different phases within the course where we more theoretically map existing systems and historical references. We will understand the premise of the productive forest, the harvesters, the saw mills, the procedures of cutting, drying, plaining, principles of fire protection, insulation, micro climatic 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.
With a critical reading we will look at the premising of the wooden industry today, what shortcomings conventional massive wood principles provide and how we can create the backdrop of a better utilizing of the forest resources, with a heightened awareness on the landscape, the actors and the principles of the building and the built.

Learning Outcome: Skills, knowledge, competencies;

We will inquire into the logic of sustainability through the logic of existing building systems, both in respect to the forest resources, the wood industry, the placement on site and the building process. We will visit the stakeholders and the sites of inquiry to develop an insight into the mechanisms of the construction process. We will build critical reflection towards the ongoing field of practice to ground alternative models and systems. During the course we will encounter various professions and their

practitioners but also understand the culture and systems of self-building and their relation to the field of construction.

During the course we will focus on skills of precision in drawing, projecting and building. We will work towards a resolution of 1:1 in both drawing and building of details to inquire how a building system might be developed. For this we will have sessions on drawing with Axel Weller, an expert in antiquarian drawing, we will have sessions with engineers and wood technicians and we will use the saw mill and machinery at school along with professional workshops to understand the possibilities within the production lines.

Finally, we will also look at the digital translation of a system and its's flexibility and work to understand how a digitalized modular systemic building system can be utilized.

We will build awareness to the holistic mindset that addresses both the forest, the site, the building materials, the building process and the 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 one (The Narrow Streams) will last for the 6 first weeks. It will be filled with seminars, invited speakers and short and intense workshops where the students work in various groups.The first phase will include introduction seminar, workshop on forestry and relations to landscape, workshop on elements and joints, on architectural systems, wooden properties and chemical by-products,

Week 3 (16th to 20th January) we will all go to visit forests and saw mills in Granvin and Voss in the vicinity of Bergen. We will focus on meeting the stakeholders of forestry and wooden industry as well as visiting some unique forests and wooden architecture. Other study trips will not be mandatory, but could be initiated if there is interest amongst the students.

The second phase (The Big River) will consist of longer stretches of work towards a final design solution with periods of full scale mock-ups and formulations of the system design and final project proposal after initial workshops on spatial quality, spatial flexibility and agents of transformation. This phase will both comprise of individual work and work in pair, groups and the class as a whole.

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 the system.

Reading list /References:

Cut & Dried: A Woodworker's Guide to Timber Technology, Ricard Jones (in the BAS library)

Skognytting av Johan Kaasa (The national library, digital version available online)

TIME BUILDS! (El Tiempo Construye!). EquipoArquitectura (Fernando Garcia-Huidobro, Diego Torres Torriti, Nicolás Tugas). Editorial Gustavo Gili, 2008.

And more to come….

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

a) both group performance,
b) the report on individual participation done by the teachers,
c) 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.