

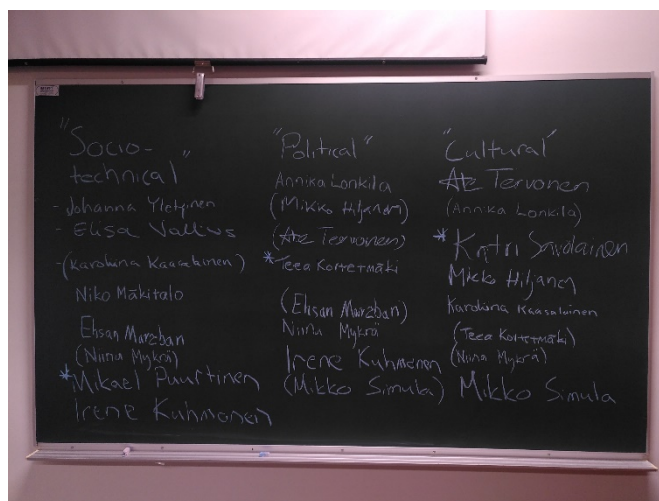
FN-DS03-IN02

INTERVENTION WITH "SUSTAINABILITY TRANSITIONS" MODULE

University

The ECF4CLIM project and the ECF4CLIM researchers were asked to take part in the planning process of a novel "Multidisciplinary Studies on Sustainability Transitions" study module (15 ECTS). A central objective of the study module is to strengthen students' multidisciplinary understanding of sustainability-related challenges and solutions. It explores sustainability transitions through the lenses of technological innovation, societal governance, and cultural behaviours. These transitions are framed as complex processes that demand multi-level and cross-disciplinary approaches.

The ECF4CLIM project was to bring insights on sustainability competences to the process. GreenComp and the initial ECF4CLIM Roadmap for sustainability competences were introduced to the planning team. The planning of the study module started in late 2023, and the first courses were implemented during the spring 2025. The planning process involved all faculties of the multidisciplinary university. The aim was to create an integrated module where disciplines are interwoven rather than treated separately.



A collaborative team of 25 participants designed the courses and lessons, emphasizing collective planning over isolated contributions. In addition to regular meetings, with the resources from ECF4CLIM, the team of 15 participants held an intensive two-day seminar in April 2024 at the university's off-campus research station. Through discussion and group work in a focused environment, the planning process and cooperation deepened. After the seminar, one ECF4CLIM researcher had focus group interviews with the planning group members. The interview data was used also in other research project, in the study about connections of the wisdom and sustainability competences, based on the Holistic Wisdom Model created by researchers of JYU. This study gave also insights to the ECF4CLIM research and this report. Finetuning of some courses, e.g. design of course about cultural and behavioural aspects of sustainability transition, is still going on. During the autumn 2025, ECF4CLIM researchers will create some videos for the course, based on the experiences in ECF4CLIM project.

Relevant difficulties

A big part of the resources comes to the university from the government, and the resources are not so huge - new openings are always hard. Finding time for the planning process was really hard for some teachers. In some faculties, a supervisor even prohibited participation unless the university provided additional resources for the initiative. In these cases, some teachers used their free time (away from their families) to join the planning, because they saw this study module as so important. There is still a risk that there are not enough resources to implement the plans and run effective courses and classes amid everyday responsibilities.

Resources

Human	
Time	
Costs	

Engagement



Personal interest and engagement of designers in developing sustainability studies at the university were the main drivers in the planning of this study module. Also, the knowledge about sustainability crises and the need for interdisciplinary approaches to solve the problems was crucial in engagement. Staff at the university are very busy, and it is a challenge to find as much time as needed. For engagement, it was very fruitful to organise a two-day seminar with the help of ECF4CLIM resources - when taken away from the university and their computers, designers could focus on deep conversations on their values and thinking, and on negotiation about the goals of this course.

Connections



The policies, decisions and practices of the university framed the planning process, so the decisions of the planning group were connected to JYU structures. Sustainability is stated as a goal of the university in the contract between the university and the Ministry of Education, and it has helped to design this course. The connections between faculties and the administration of the university have been crucial. Each faculty has power only over its own things, and in some faculties, there are nationwide demands for the contents of studies (psychology, teacher education), so for those students, this kind of course is hard to fit into their studies. The group could not make autonomous decisions, but negotiations were needed between various parties. For example, the main facilitator of this planning process negotiated with the administration and faculties. Some negotiations have been hard: not all the deans buy the idea of this course. There are diverse understandings of what research and knowledge are, and what are only opinions. The whole variety of life philosophies also exists at universities.

During the process, many designers said that persistent discussions helped to understand and also accept the different views of others. It was important to understand and accept that the goal is not a single tone and vision, but parallel understandings, and it is still possible to go forward. The meetings and discussions on the overall goals of the module were needed to frame the problem in sustainability transitions. The future students will have a systemic understanding about sustainability transitions. The goal is that their competence on the driving forces of sustainability transition will be enhanced, and their thinking will widen from single discipline to multidisciplinary thinking.

Change



The long-term vision of this course is that students will broaden their understanding of sustainability and the driving forces behind the sustainability transition—from a single-discipline perspective to multidisciplinary thinking—and gain the competence to become professionals in their field, contributing to sustainable change and transition. The goal is that the students get competence to negotiate with professionals from different disciplines to find together the best results for sustainability in their future work. The idea was also that with this novel multidisciplinary approach, it is possible to create something totally new, because we need new solutions to current sustainability problems.

The goal of this ECF4CLIM intervention was that, with the ideas from the ECF4CLIM project, this course could be better. Our vision was that we could promote the learning of designers.

Actions



The biggest challenge with the planning process is the scarcity of time of teachers and staff. One solution was to organise the planning seminar, which gave the designers an isolated place and time for planning and discussing. The ECF4CLIM resources were crucial in this.

A prerequisite for this study module was that the university had introduced new policies promoting both multidisciplinary and sustainability. These policies likely made it possible for the rectorate and deans to approve the inclusion of this course in JYU's curriculum.

The personal engagement of the designers was very important for making the planning process happen. Also, patience was needed: big changes in thinking and action take time. The designers made personal choices to prioritise the planning over other tasks or free time. The main facilitator of the module planning did a very good job in planning the meetings and structuring the results from the meetings. Without his personal contribution, the planning would be really hard. The cooperation of the designers in a friendly and supportive atmosphere was also a crucial factor in realising the study module.

Analytical Framework

Individual Competences

It was important that the designers of this study module had comprehensive knowledge of the sustainability crisis from the perspectives of their disciplines and understood the need for sustainability transition. They were ready to communicate their perspectives, were open to different views, and were able to negotiate the interdisciplinary goals of this study module with others by widening their assumptions. In the interviews, the designers said that the planning process has been a learning experience for them, and it is something they would like to offer to the students, too. In the process, there were only limited time resources for planning, and they had to prioritise the planning work over some other demands of the work in the busy life of the university. The main facilitator of the process needed individual competence to make compromises between different views of participants, so that the result was acceptable for all. The researchers of the ECF4CLIM project needed to have competence to present the ideas from the ECF4CLIM project so that the ideas were beneficial to the planning process. In the future, the students will gain individual competence in multidisciplinary sustainability transition: knowledge from different disciplines, skills to cooperate with people with different backgrounds, and the ability to make a change with them toward sustainability.

Collective Competences

This novel study module enhances the university's collective competence. The study module is part of the curriculum of JYU, and every student in the University of Jyväskylä includes this multidisciplinary study module in their studies. During the planning process, new resources for this course promoting sustainability will be negotiated. The university was not used to this kind of study modules that combine many faculties, so there were no ready structures for, for example, allocating resources for planning and teaching, or defining administrative owners of the module, so new structures were created in negotiations with the rectorate and deans of faculties. The atmosphere in the planning group was accepting and pro-co-operation, and the participants in the planning group inspired each other.

Technical-material Competences

Students will also gain competence - both knowledge and skills - in understanding technical-material issues in sustainability transition.