

Summary of learning diaries from the spring 2023 pilot of the *Living with changing climate* course

General questions:

Describe your background and your interest in the theme of the course (Living with climate change).

What are your expectations for the course?

Why did you take part to the piloting of the course?

Questions related to Module 1:

Learning outcomes for Module 1:

- *After the course, the student is familiar with the real-life actions and action gaps in climate change adaptation and mitigation at different levels of the society.*
- *You will know why global climate action is crucial and what are the main risks from climate change to biodiversity and humankind.*
- *You are introduced to the goals of climate action via mitigation and adaptation, climate law and sustainable development.*
- *You will understand what climate strategies and roadmaps mean.*
- *You will understand why local understanding is needed for climate change action.*
- *You are introduced to the concept of extreme event attribution.*
- *You know where to find relevant examples for adaptation, risk and impact data, and what is an adaptation process.*

Read the learning aims of the course (listed above). Do you understand the learning outcomes and are they relevant?

In your opinion, what aims are the most important ones and why?

How would you use the things you learned during this module (e.g. in you work or future studies)?

How many hours did you use on each activity (individual learning material, assignments, learning diary) on this module?

Describe, which elements of the course (e.g. learning materials, assignments) felt too easy or too hard?

Summary of learning diaries feedback for Module 1: Introduction

Learning outcomes: Overall, Module 1 was considered to address the learning outcomes very well, and the assignments were viewed as interesting.

"I think the material in Module 1 was interesting and most of the assignments were nice and easy, as they are supposed to be in the introduction module to the course."

"The video on Australia specially made me see new angles on adapting to climate change and how a community should be engaged with it. "

Participants expressed interest in additional material on:

- climate strategies and roadmaps

- further discussion on local and global climate change, and on local and global adaptation and mitigation
- how climate laws influence climate action

Questions related to Module 2:

Learning outcomes for Module 2:

- *You will know the concepts of weather and climate.*
- *You will understand how distributions of weather events and their extremes are connected to climate.*
- *You will be able to critically examine public discussion on weather and climate phenomena and claims.*
- *You will know the difference between local and global, current vs. future phenomena.*
- *You will understand how climate change is linked to human-caused emissions of greenhouse gases and aerosols.*
- *You will know how scenarios are employed to make projections of future climate change.*
- *You will know the concept of negative emissions technologies.*

How would you use the things you learned during this module (e.g. in you work or future studies)?

How are the things you learned in this module connected with what you learned in the first module and project work on real-life example?

How many hours did you use on each activity (individual learning material, assignments learning diary) on this module?

Describe which elements of the course (e.g. learning materials, assignments) felt too easy or too hard.

Summary of learning diaries feedback for Module 2: Weather and Climate

Learning outcomes: Overall, Module 2 was seen as providing a great overview of weather and climate, and climate change, climate events and use of scenarios.

“I think the interactive atlas and information of (Assignment) 2.2 were connected to the introduction in the sense that they deepened what I had already learned.”

Some participants felt that the assignments requiring statistical knowledge were somewhat too difficult or unclear, although this was not the case for everyone.

Questions related to Module 3:

Learning outcomes of Module 3:

- *To be able to find open weather and climate data for a defined location and region.*
- *To get an overview of different types of weather and climate observations and models openly available.*

How would you use the things you learned during this module (e.g. in you work or future studies)?

How are the things you learned in this module connected with what you learned in the previous modules and project work on real-life example?

How many hours did you use on each activity (individual learning material, assignments learning diary) on this module?

Describe which elements of the course (e.g. learning materials, assignments) felt too easy or too hard?

Summary of learning diaries feedback for Module 3: Where to find Data

Learning outcomes: Overall, Module 3 was found to cover the learning outcomes very well.

"I really learned about new applications that can be used, as well as how to use some of the features of them."

"This module builds nicely on the knowledge base created in the first two modules. It also leads to thinking about the project work and how this kind of data can be used in practice."

In general, the assignments were considered useful and contributed significantly to participants' learning. However, they were also viewed as quite time-consuming, and several participants encountered serious technical difficulties.

Questions related to Module 4:

Learning outcomes of Module 4:

To learn what kind of applications there are for giving practical/usable information regarding the different aspects of the climate system:

- *Weather*
- *Climate (incl. seasonal forecasts)*
- *Climate change*

How would you use the things you learned during this module (e.g. in your work or future studies)?

How are the things you learned in this module connected with what you learned in the previous modules and project work on real-life example?

How many hours did you use on each activity (individual learning material, assignments learning diary) on this module?

Describe which elements of the course (e.g. learning materials, assignments) felt too easy or too hard?

Summary of learning diaries feedback for Module 4: Decision-making and Applications

Learning outcomes: Overall, Module 4 was perceived to cover the learning outcomes very effectively.

"The module connected well to the previous modules in terms of providing hands-on tools and explaining how they can be used in decision making. "

"For the project it would have been helpful to have the module 4 before doing the interview because we probably would have adjusted our interview plan according to the information given in the module."

There were divided opinions about the assignments:

- *"I think this chapter had nice, not-too-difficult assignments and material that did not take too much time." vs.*
- *"Many instructions of the assignments were unclear."*

Questions related to Module 5:

Learning outcomes of Module 5:

To be able to investigate and communicate

- *How weather and climate data is used in real organizations and businesses.*

- *What kind of needs for weather and climate data arise from organizational decision-making, culture, operations and/or its stakeholders.*

How would you use the things you learned during this module (e.g. in you work or future studies)? How would you improve the assignment of the project for real-life example?

How many hours did you use on each activity (peer-review, group work, learning diary) on this module?

Summary of learning diaries feedback for Module 5: Project work

Learning outcomes: Overall, Module 5 was well received and considered very useful. Some participants, however, experienced difficulties locating and interpreting the project-work instructions, and the shifting deadlines created additional confusion. In addition, an exercise that required generating something new from the data was considered particularly challenging.

“The interview provided very good understanding of the industry and thus was a positive experience, although making the report and plan took quite a lot of time.”