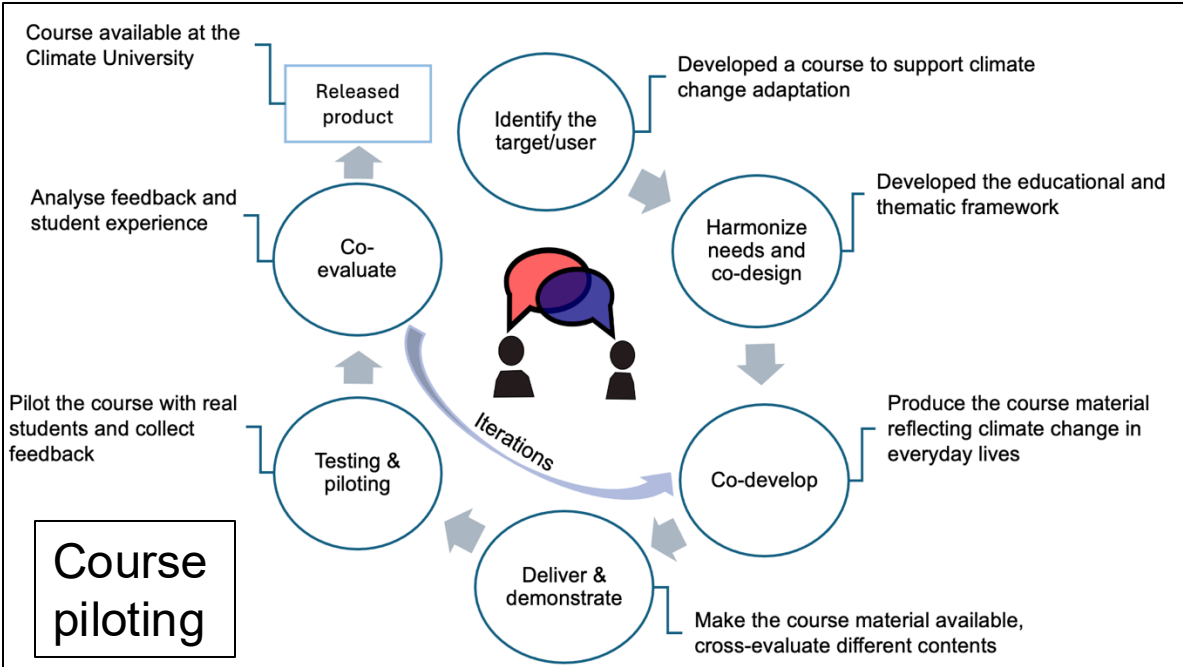# EGU25-18727: Climate competencies for real-life action: developing a master level course "Living with changing climate"

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Motivation

- In order to effectively mitigate, adapt to and benefit from climate change, society needs **climate expertise**.
  - A master-level course, **"Living with changing climate"** was developed.
- Because climate change penetrates the society, the course design needs a <u>multidisciplinary</u> team of expertise (education-climate-societal).
- The course is part of the Climate University curriculum.
  - Climate University (www.climateuniversity.fi), is a network of higher education institutions in Finland that provides climate and sustainability education in collaboration with schools and working life.

Course piloting

Themes

- The causes and complexity of climate change
- impacts and adaptation needs
- future scenarios and their links to mitigation efforts
- open-source weather and climate data, applications and their usage
- principles of climate services and its support to decision making
- stakeholder collaboration via a real-life use case.

Challenges 1) Teaching transdisciplinary climate expertise and interlinking the broad range of topics. **Solution:** Gather a team of experts from different disciplines for designing the course to ensure the transdisciplinary course contents. 2) Providing relevancy for the course focusing on climate action in professional settings. **Solution:** Interview stakeholders (companies, city authorities, etc) regarding their needs and usage of climate information in their business/work. 3) Designing an online course for students with a wide variety of backgrounds. **Solution:** Design the course material and assignments to reflect the different backgrounds.

Week 1	2	3	4	5	6	7
Module 1: Introduction	Module 2: Weather & climate	Module 3: Where to find data?	Module 4: Climate services and decision-making			

Module 5: Project work on real-life example