Co-funded by the Erasmus+ Programme of the European Union

Estonian University of Life Sciences

ClimEd

Multilevel Local, Nation- and Regionwide Education and Training in Climate Services, Climate Change Adaptation and Mitigation

ClimEd VII Training
Feedback on Moodle Courses and MOOCs developed Under Training V and VI

Veljo Kabin
Educational Technologist
April 9, 2025, Vila-seca, Spain

Estonian University of Life Sciences

About me

What are my assignments in university?

- Coordinate digital learning at the university
- Work out and implement new innovative solutions
- Make sure the old ones work well
- Advise and support our lecturers in the use of digital tools, digital environments and digital devices in the study process
- Organise and conduct training in digital learning

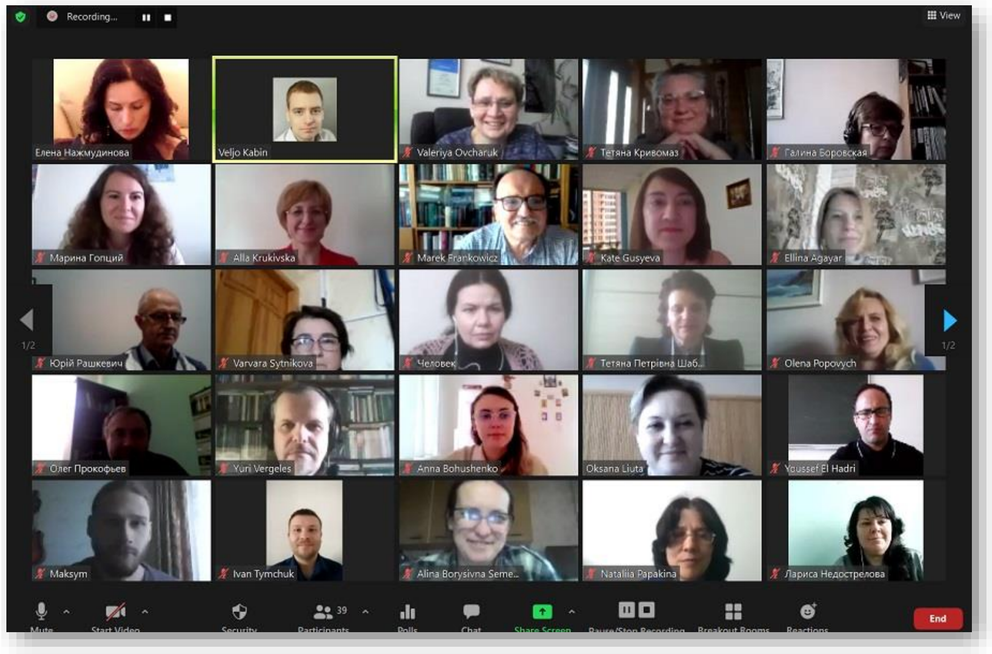
ClimEd 1st Training

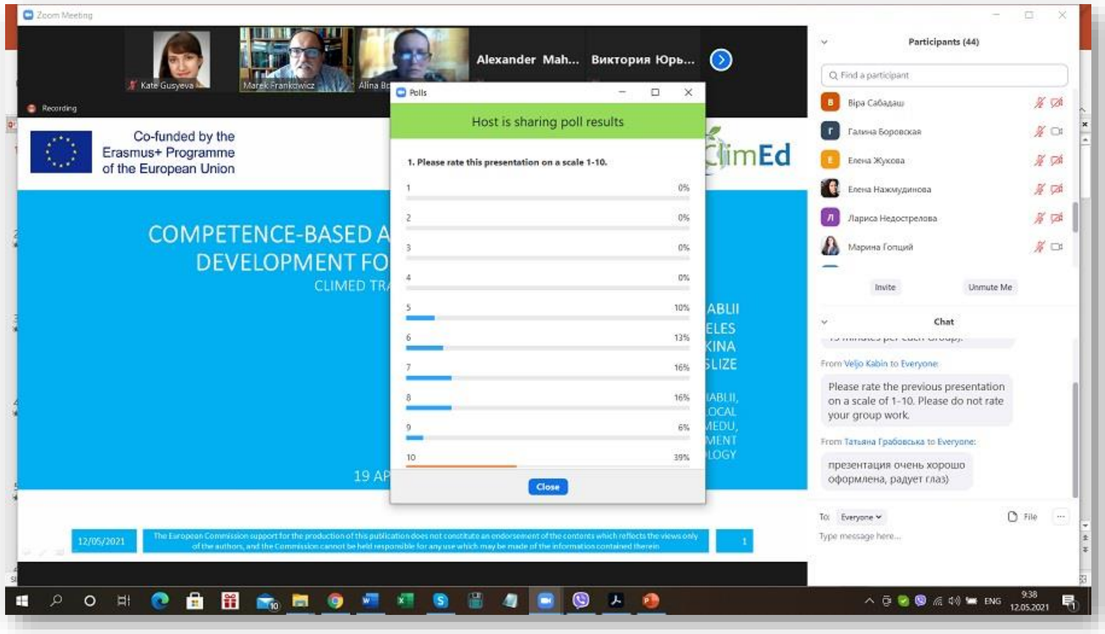
The ClimEd 1st training took place during the second corona spring, from **April 19 to May 12, 2021** and was conducted entirely online.

The training was on the topic of Competency-Based Approach to Curriculum Development for Climate Education.

ClimEd 1st Training

The training included three training days and one day for presentations. There were 46 participants.





ClimEd 5th Training

The ClimEd 5th training took place from **September 30 to October 4, 2024** at the Forestry Building of the Estonian University of Life Sciences and on Zoom.

ClimEd 5th Training

In total, 34 persons were accepted to participate in this hybrid training.

ClimEd 5th Training

The first two days of the training were mostly lecture-based.

I presented on advanced techniques in Moodle, including developing interactive online courses, implementing blended/online learning strategies and designing and managing online exams in Moodle.

ClimEd 5th Training

On the third day - group work introduction followed by group activities.

On the fourth day - group work presentations.

A total of 8 groups of 4 members each were formed and each group was tasked with creating one assignment, one quiz with at least 10 questions, as well as evaluating the group work of another group.

Group work

Please create one quiz for the group.

- The topic is Climate Services, Climate Change Adaptation and Mitigation.
- Use Moodle's quiz tool for this.
- Create a question bank of 15 questions, including: at least 4 multiple-choice questions, at least 1 essay-type question, as well 3 other types of questions.
- Therefore, there should be at least 5 different types of questions in question bank. Questions with one or multiple correct answers are under one question type.
- When adding questions to the quiz, use randomization for at least some of the questions so that students receive different questions.
- The quiz should consist of at least 10 questions.

Group work

Assignment

- Please create one assignment for the group.
- The topic is Climate Services, Climate Change Adaptation and Mitigation.
- Use Moodle's assignment tool for this.
- For grading the assignment, use the Rubrics grading method.
- Set at least 3 criteria for assessment and at least 3 levels, where each level provides a different number of points.
- Include a description for each point value.
- Configure all the general settings for the assignment, including when the work can be submitted and how it can be submitted.

A few examples

QUIZ

Quiz E4

Opened: Thursday, 3 October 2024, 09:15
Closed: Thursday, 3 October 2024, 17:00

ASSIGNMENT

Your Ecological Footprint

Opened: Thursday, 3 October 2024, 09:00
Due: Thursday, 3 October 2024, 18:00

A few examples

Opened: Thursday, 3 October 2024, 09:15
Closed: Thursday, 3 October 2024, 17:00

The **test** will be **available** on **October 3st from 9:15 AM to 5:00 PM (**. You will have a **time limit** of **40 minutes** to complete the test, and you will only be able to take the **test once during that time**.

The test consists of **10 random questions**, and takes approximately 30 minutes to answer. **Each question is on a separate page,** and you will need to move to the next page once you have completed your answer. **Please note that it is not possible to move backward or forward between pages.** So, if you have answered a question and moved on to the next page/question, it will not be possible to go back to the previous page/question.

The **maximum score** for the quiz is **20 points**, and the passing **threshold is 12 points**.

If you do not complete the test within the 40-minute time limit, the test will automatically be submitted. While there are no fixed time limits per page, it is recommended that you plan your time use accordingly.

A few examples

Rank in descending order the top 5 countries that invest the most in renewable energy.

- USA
- China
- Japan
- Germany
- India

A few examples – Correct answer

Rank in descending order the top 5 countries that invest the most in renewable energy.

- China
- USA
- Japan
- India
- Germany

A few examples

greenhouse effect | global warming | climate change | ice age

The process of trapping heat in the atmosphere due to greenhouse gases is called the _____.

A few examples – Correct answer

ice age | global warming | greenhouse effect | climate change

The process of trapping heat in the atmosphere due to greenhouse gases is called the greenhouse effect.

A few examples

When did Ukraine ratify the Paris Agreement?

- a. 2018
- b. 2020
- c. 2015
- d. 2016

A few examples – Correct answer

When did Ukraine ratify the Paris Agreement?

- a. 2018
- b. 2020
- c. 2015
- d. 2016

A few examples

Is sea level rise due to global warming?

- ○ True
- ○ False

A few examples – Correct answer

Is sea level rise due to global warming?

- (●) True
- ( ) False

A few examples

What is the current officially recorded highest air temperature on Earth in Celsius?

Answer:

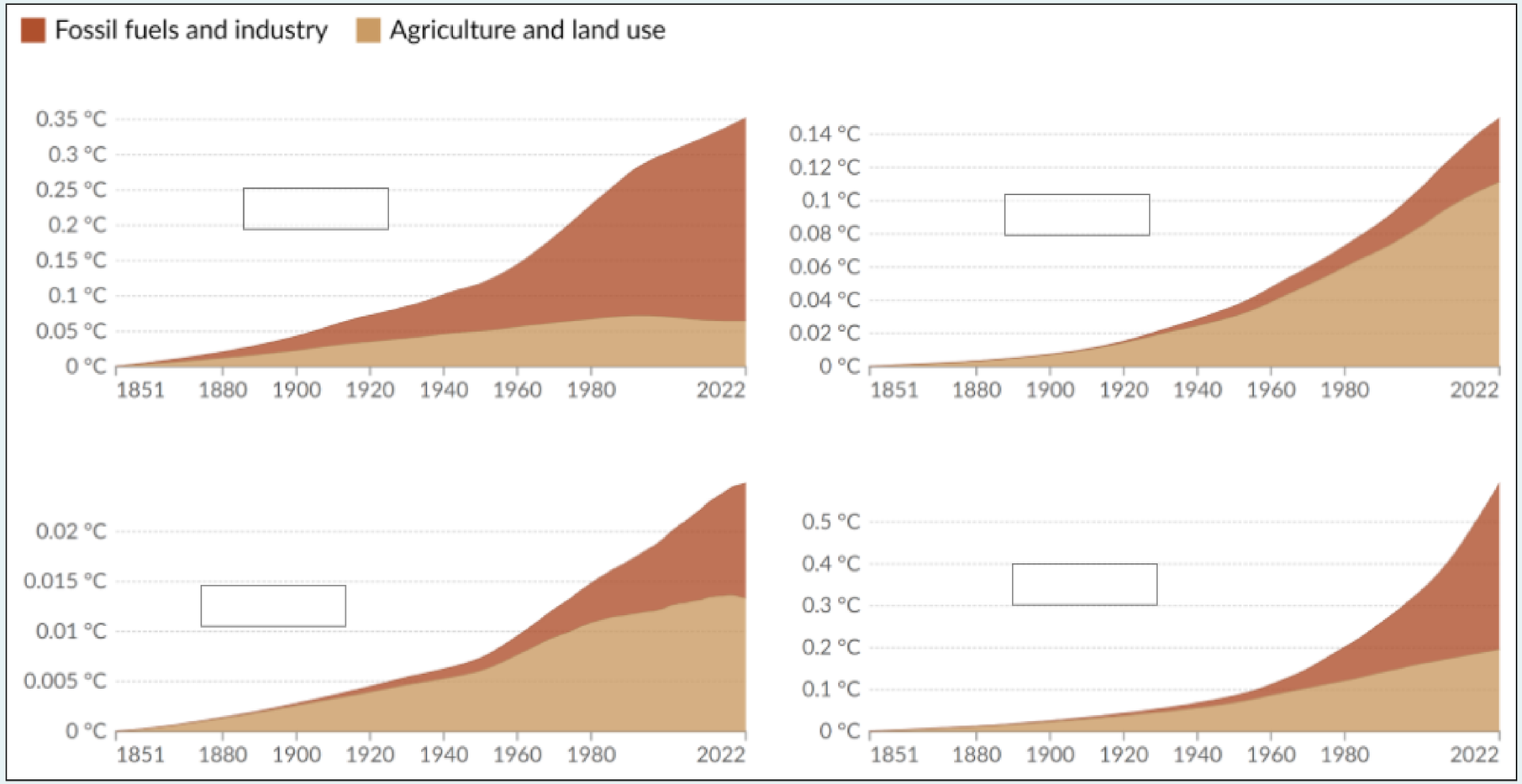
A few examples – Correct answer

What is the current officially recorded highest air temperature on Earth in Celsius?

Answer: 567

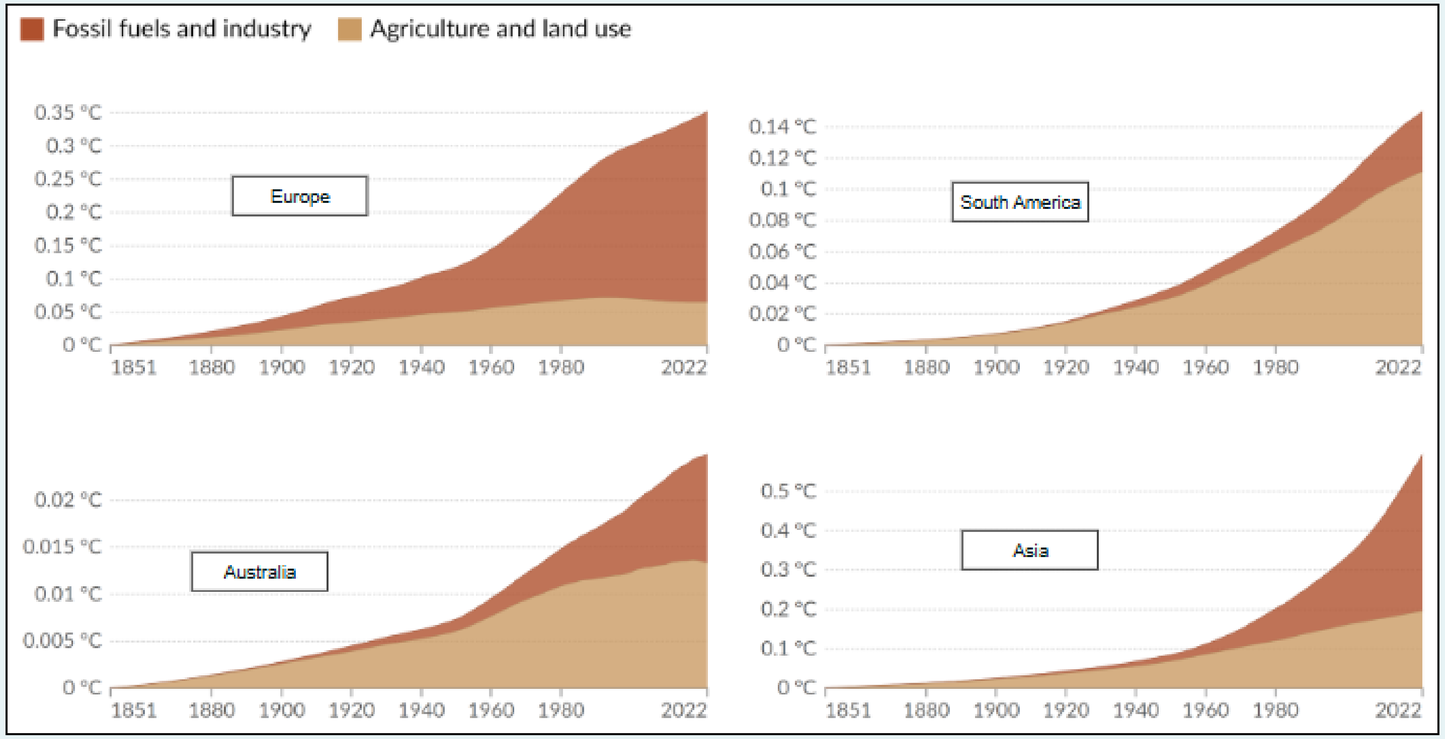
A few examples

The picture shows global warming contributions from fossil fuels and land use for different continents. Identify which chart depicts which continent by dragging and dropping the text on the image. Pay attention to the absolute value of emissions, the proportion of fossil fuels / land use contribution, the graphs' curvature, and the time scale.



A few examples – Correct answer

The picture shows global warming contributions from fossil fuels and land use for different continents. Identify which chart depicts which continent by dragging and dropping the text on the image. Pay attention to the absolute value of emissions, the proportion of fossil fuels / land use contribution, the graphs' curvature, and the time scale.



A few examples

How can we reduce greenhouse gas emissions from agricultural activities?

A few examples - Assignment

As part of this assignment, students are required to explore the importance of climate services, adaptation measures to climate change, and methods of mitigating its impacts. The task involves analyzing scientific literature, using international reports, and developing proposals to improve climate strategies at the national or regional level.

Objective:

- To assess students' understanding of climate services and their significance in the context of global climate change.
- To formulate proposals for practical adaptation measures and methods of mitigating climate risks.

A few examples – Assignment

Understanding of the Topic	In-depth understanding and analysis of climate services, adaptation, and mitigation ***10 points***	General understanding without in-depth analysis or details ***8 points***	Superficial or incorrect understanding of the topic ***4 points***
Quality of Research	A wide range of sources used, well-structured conclusions based on scientific materials ***10 points***	Research is based on a few sources, general conclusions ***8 points***	Limited or no use of sources ***4 points***
Formatting and Structure	Logically structured, with no formatting errors ***10 points***	Generally structured, but with formatting flaws ***8 points***	The work does not follow the structure and contains many errors ***4 points***

Feedback - General

1. Since the time for group work was about 4 astronomical hours, it was somewhat limited. Fortunately, many participants had experience with Moodle, which helped alleviate the situation.

A possible solution would be to either give more time or assign fewer tasks.

Feedback - General

2. It was more challenging to guide the online participants, but all groups successfully completed the task. The course included study guide.

3. There were a few moments when multiple groups needed guidance at the same time and some had to wait.

Feedback - General

4. Using Moodle requires an account, which, in the case of foreign participants, needs intervention from Moodle support. Since we use a central Moodle system, the support team is located at the ministry.

Although I asked participants to create an account at the beginning of the training and provided instructions, not everyone managed to get one in time for the group work. However, it was crucial that at least one group member had an account and this requirement was met.

Feedback - Content

1. I also talked about what makes a good question and the answer options, but this time the main focus was on the technical side and we didn’t have time to go into the content of the questions.

A solution would be to have fewer questions but focus more on their content.

Feedback - Content

2. More questions were created than required in the learning guide.

3. In most courses more than one group member contributed as question authors.

4. At least half of the group members also completed another group's quiz as a student.

5. Two groups built an entire Moodle course, including learning materials that were not required.

Evaluation

The e-evaluation of the ClimEd 5th Training was done using two questionnaires distributed among participants.

1st questionnaire – (Evaluation of the Training)

100% of the participants estimated overall rating for this course as "**very good**" and "**good**";

Training materials were of "excellent" (75%) and "very good" (25%) quality

Information about the training was sufficient (100%) and participants will recommend such training to colleagues (100%).

Evaluation

2nd questionnaire – (Self-Evaluation of the Obtained Competencies and Skills)

About 98% of participants “fully agreed” and “mostly agreed” that they have obtained/ improved their competencies and got skills working as groups.

Certificate

Eesti Maaülikool
EMU Estonian University of Life Sciences

CERTIFICATE

NO 5.1-16/3611-

hereby confirms that

has attended and successfully completed
the Erasmus+ **ClimEd Training** (onsite)
on

Blended/Online Learning for Climate Change:
Bridging Theory, Technology and Practical Application

provided in the period from September 30 to October 4, 2024
at the Estonian University of Life Sciences
(register code 74001086, Fr. R. Kreutzwaldi 1, 51006 Tartu, EHIS code 174237)

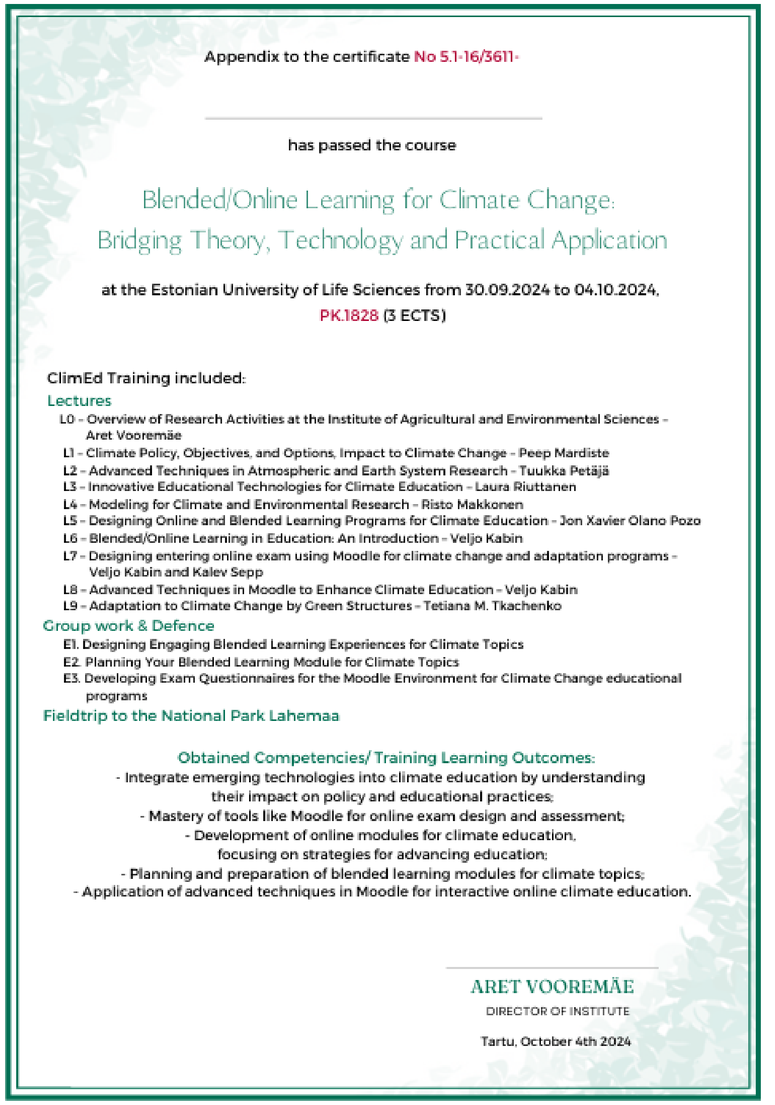
VELJO KABIN	KALEV SEPP	ARET VOOREMÄE
CO-HEAD OF AUTUMNSCHOOL	CO-HEAD OF AUTUMNSCHOOL	DIRECTOR OF INSTITUTE

Tartu, October 4th 2024

Erasmus+ ClimEd Project
"Multilevel Local, Nation- and Regionwide Education and Training in Climate Services, Climate Change Adaptation and Mitigation"
(619285-EPP-1-2020-1-FI-EPPKA2-CBHE-JP)
http://climed.network

Co-funded by the Erasmus+ Programme of the European Union

ClimEd



Appendix to the certificate No 5.1-16/3611-

has passed the course

Blended/Online Learning for Climate Change:
Bridging Theory, Technology and Practical Application

at the Estonian University of Life Sciences from 30.09.2024 to 04.10.2024,
PK.1828 (3 ECTS)

ClimEd Training included:

Lectures

L0 – Overview of Research Activities at the Institute of Agricultural and Environmental Sciences – Aret Vooremäe
L1 – Climate Policy, Objectives, and Options, Impact to Climate Change – Peep Mardiste
L2 – Advanced Techniques in Atmospheric and Earth System Research – Tuukka Petäjä
L3 – Innovative Educational Technologies for Climate Education – Laura Riuttanen
L4 – Modeling for Climate and Environmental Research – Risto Makkonen
L5 – Designing Online and Blended Learning Programs for Climate Education – Jon Xavier Olano Pozo
L6 – Blended/Online Learning in Education: An Introduction – Veljo Kabin
L7 – Designing entering online exam using Moodle for climate change and adaptation programs – Veljo Kabin and Kalev Sepp
L8 – Advanced Techniques in Moodle to Enhance Climate Education – Veljo Kabin
L9 – Adaptation to Climate Change by Green Structures – Tetiana M. Tkachenko

Group work & Defence

E1. Designing Engaging Blended Learning Experiences for Climate Topics
E2. Planning Your Blended Learning Module for Climate Topics
E3. Developing Exam Questionnaires for the Moodle Environment for Climate Change educational programs

Fieldtrip to the National Park Lahemaa

Obtained Competencies/ Training Learning Outcomes:

- Integrate emerging technologies into climate education by understanding their impact on policy and educational practices;
- Mastery of tools like Moodle for online exam design and assessment;
- Development of online modules for climate education, focusing on strategies for advancing education;
- Planning and preparation of blended learning modules for climate topics;
- Application of advanced techniques in Moodle for interactive online climate education.

ARET VOOREMÄE
DIRECTOR OF INSTITUTE

Tartu, October 4th 2024


zoom
Workplace

ClimEd 6th Training

The ClimEd 6th training took place from **February 10 to February 13, 2025** at the Forestry Building of the Estonian University of Life Sciences and on Zoom.

ClimEd 6th Training

In total, 58 persons were accepted to participate in this hybrid training.

ClimEd 6th Training

The first two days of the training were mostly lecture-based.

I spoke on the following topics: Effective tools and opportunities for a successful MOOC, content development and presentation in MOOCs and integrating interactive elements in MOOCs and video editing tools.

ClimEd 6th Training

On the third day - group work introduction followed by group activities.

On the fourth day - group work presentations.

Group Work

Create a short MOOC (MicroMOOC) as a group, which includes the content of one module/week and supports active learner participation.

Work Steps:

Choose a topic for your MOOC.

Create the structure of the module/week, including:

- Learning objectives
- Key learning materials (text, videos, links, etc.)
- Learning activities (quizzes, forums, assignments, etc.)
- Assessment methods (if applicable)

Group Work - Examples

Group Work – Examples

[Climed6-6] The Climate Puzzle: Exploring the Forces Behind Global Change

Course | Settings | Participants | Grades | Reports | More

Collapse all

Welcome to The Climate Puzzle: Understanding the Forces Behind Global Change!

We are glad to have you in this course! Climate change is one of the most pressing challenges of our time, and understanding its causes is the first step toward finding solutions.

Throughout this course, we will explore the natural and human-driven factors behind climate change. You will learn how the Earth's climate system works, what influences global temperatures, and how our actions shape the environment.

The course is designed for learners of all backgrounds - whether you are a student considering a career in environmental sciences or simply someone curious about how the world is changing. Through engaging lectures, interactive activities, and discussions, we encourage you to think critically and apply your knowledge.

We invite you to participate actively, share your thoughts, and ask questions. Let's explore the climate puzzle together!

Enjoy the course!

Feedback

1. Most groups created their work in our Moodle, but one group also used their own university's Moodle.
2. Since there were many groups, not everyone had time to give their presentation, so we selected the presenters by lottery.
3. We focused more on the technical side than on the content.
4. The MOOCs varied and some groups did more than was required.

ClimEd 6th Training – Quiz results

- Quiz contained a total of 10 multiple-choice questions. We created the test in Microsoft Forms.
- In total, there were 46 respondents.
- The average score was 8.8.
- The average response time was 08:34.
- 28 participants answered all the questions correctly.

Quiz results – The most difficult question

3. How does the **role of the teacher differ** in a formal online course compared to a MOOC? (1 punkti)

80% vastajatest vastasid sellele küsimusele õigesti.

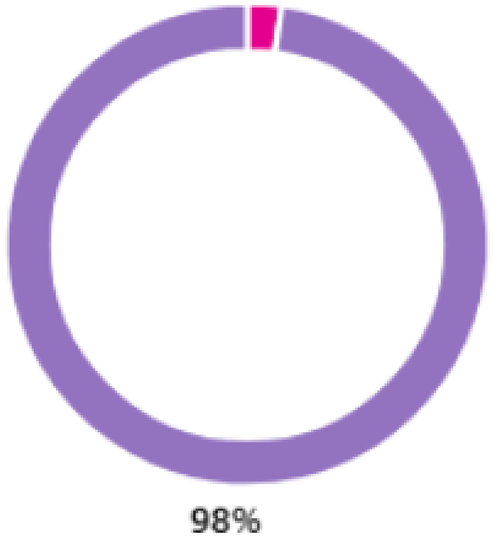
In a MOOC, the teacher is actively involved in guiding students and providing personalized...	5
In a formal online course, the teacher has a limited role and students are expected to be fully self-...	1
In a formal online course, the teacher provides structured guidance, assessment feedback, and... ✓	36
In both a MOOC and a Formal Online Course, the teacher plays the same role in guiding and assessin...	3

Quiz results – The easiest question

10. How to look **good on camera**? (1 punkti)

98% vastajatest vastasid sellele küsimusele õigesti.

Position the webcam below eye level and wear bright, patterned clothing to stand out on camera.	0
Look at the screen instead of the camera to maintain engagement and sit as close to the camera as...	1
Sit in front of a bright window and have a detailed and visually interesting background to make your...	0
Place the webcam at eye level or slightly above, position the camera so that you are centered on th...	43 ✓



Evaluation

The e-evaluation of the ClimEd 6th Training was done using two questionnaires distributed among participants.

1st questionnaire – (Evaluation of the Training)

97% of the participants estimated overall rating for this course as" **very good**" and "**good**".

Training materials were of "excellent" (90%) and "very good" (10%) quality.

Information about the training was sufficient (100%) and participants will recommend such training to colleagues (97%).

Evaluation

2nd questionnaire – (Self-Evaluation of the Obtained Competencies and Skills)

About **92%** of participants “fully agreed” and “mostly agreed” that they have obtained/ improved their competencies and got skills working as groups.


Sēto saimnīca

www.emu.ee #maaylikool #maaylikool

Thank You!

Co-funded by the Erasmus+ Programme of the European Union

Estonian University of Life Sciences

ClimEd