

CERTIFICATE



ANTON SHANYHIN

has successfully completed the international workshop

“Standardization of Professional Development Courses, Digital Tools, and Mutual Expertise”

held from 10 to 14 November 2025
under 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>



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

Lectures

- 1 Global Warming, Greenhouse Gases, and Climate Change Indicators on Earth
- 2 Water Resources of Ukraine under Current Climate Change Conditions and Future Scenarios
- 3 Green Constitutions: Origins and Positive Effects
- 4 Planetary Boundaries: Concept, Indicators, and Challenges
- 5 Hazardous Hydrological Phenomena on Rivers under Climate Change Conditions
- 6 Climate Raster Data
- 7 Climate Change: Modeling of Possible Consequences
- 8 Climate and Non-Communicable Diseases: Emerging Risks for Public Health
- 9 Spatial Modelling of Climate Vulnerability and Risks

Learning Outcomes Achieved

upon successful completion of the workshop

“Standardization of Professional Development Courses, Digital Tools, and Mutual Expertise”

the participant has demonstrated the ability to:

- 1 Analyse contemporary climate change processes and their sectoral impacts, including hydrological, environmental, and public health risks, using interdisciplinary approaches.
- 2 Apply spatial and digital tools, including climate raster datasets and GIS-based methods, for the assessment of climate vulnerability and risk.
- 3 Develop and standardise professional development courses in alignment with defined learning outcomes, quality assurance principles, and adult learning (andragogical) methodologies.
- 4 Integrate unified visual identity standards, digital learning tools, and peer-review mechanisms into collaborative course development within an international academic framework.

Practical Workshops

- 1 Spatial Processing of Climate Raster Data in QGIS
- 2 Assessment of Spatial Vulnerability of Territories to Climate Change

Round Table Discussions

- 3 Joint Development and Mutual Learning among Teams
- 4 Designing Courses Based on the Principles of Adult Learning (Andragogy)
- 5 Unified Visual Style and Course Branding
- 6 Digital Tools for Course Development and Interactive Learning
- 7 Course Peer Review
- 8 Summary of Key Results. Final Discussion. Future Collaboration