



Report

Development of Course 1

“Strategic Adaptive Management for Sustainable Reconstruction and Restoration”

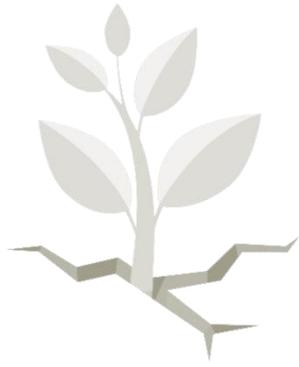
Kharkiv, December 2025

Maryna Barun



Co-funded by
the European Union





Development of Course 1

“Strategic Adaptive Management for Sustainable Reconstruction and Restoration”

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Figure 1: Group picture during the Spring School of course 1 at VILNIUS TECH in May 2025 (© VILNIUS TECH)



Figure 2: Course illustration on the Digital Teaching Network platform for course 1

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LIST OF ABBREVIATIONS

| Abbreviation | Full Term |
|---------------------|--|
| C 1 | Course 1 |
| EU | European Union |
| HNEE | Eberswalde University for Sustainable Development |
| KhNAHU | Kharkiv National Automobile and Highway University |
| NTU | National Transport University |
| NUOS | Admiral Makarov National University of Shipbuilding |
| OSENU | Odessa State Environmental University |
| PAEW | Professional Association of Environmentalists of the World |
| PRZ | Rzeszow University of Technology |
| PSTU | Pryazovskyi State Technical University |
| TUL | Technical University of Liberec |
| UNFU | Ukrainian National Forestry University |
| VILNIUS TECH | Vilnius Gediminas Technical University |
| WP | Work Package |
| WP2 | Work Package 2: Diagnostics |
| WP3 | Work Package 3: Network Development |
| WP4 | Work Package 4: Course Development |
| WP5 | Work Package 5: Dissemination |
| ZPSU | Zhytomyr Polytechnic State University |



1. Summary

This report has been prepared as part of the Erasmus+ Transformational Learning Network for Resilience (*TransLearnN*) and is dedicated to the development, implementation and testing of the course “Strategic Adaptive Management for Sustainable Reconstruction and Restoration”.

The course introduces students to the fundamentals and practical tools of strategic adaptive management in the context of multiple crises, post-war reconstruction, and the need for a transition to sustainable development. Course participants learn how organisations and communities can create long-term economic, environmental and social value while adapting to high uncertainty, infrastructure destruction, resource constraints and increasing demands for climate neutrality and social justice.

The aim of the course is to promote systematic thinking and risk management, as well as joint decision-making in the sphere of natural resource management, to develop soft skills aimed at forming leadership in initiating change to achieve sustainable development goals in various sectors and spheres of public activity, to familiarise with modern approaches and challenges for sustainable restoration and reconstruction in various sectors of Ukraine.

The subject is theoretical and methodological foundations, methodological provisions of scientific directions of strategic adaptive management development for sustainable restoration and reconstruction in various sectors of Ukraine. The main objectives of studying this discipline are:

- to substantiate and present the main theoretical and methodological foundations for the implementation of sustainable development principles;
- to promote systematic thinking and joint decision-making using the Conservation Standards methodology as an example;

- to provide an overview of current challenges for sustainable restoration and reconstruction in various sectors of Ukraine.

Competencies

- The ability to generate new ideas, solve complex problems in the field of ecology, nature conservation and rational nature management, which requires a profound rethinking of existing knowledge and the creation of new comprehensive knowledge and/or professional practice, apply modern methodologies of scientific and scientific-pedagogical activity, conduct independent scientific research, the results of which are scientifically novel and have theoretical and practical significance;
- Ability to work in an international context;
- Ability to conduct original research, achieve scientific results that create new knowledge in the field of ecology and related interdisciplinary areas, evaluate and ensure the quality of research being conducted;
- Ability to use modern tools, electronic information resources, and specialised software in scientific and educational activities, in particular for modelling processes and making optimal decisions in the sphere of ecology, nature conservation, and rational nature management.

Learning outcomes

- Ability to develop strategies for nature conservation and natural resource use;
- Knowledge of the principles of ecosystem functioning and their interaction with socio-systems;
- Understanding of approaches to mitigating the negative impact of social systems on ecosystems;
- Knowledge of the specific characteristics of different sectors;



- Ability to develop concepts for sustainable reconstruction and restoration in various sectors;
- Ability to work in a team;
- Ability to think in an interdisciplinary manner;
- Leadership;
- Ability to build a network;
- Communication skills;
- Team building;
- Presentation skills;
- Public speaking skills.

The pilot implementation of the discipline 'Strategic Adaptive Management for Sustainable Recovery and Reconstruction' confirmed its high relevance, significant practical value and full compliance with the modern challenges of training specialists capable of effectively managing the processes of post-war recovery, reconstruction and transition to sustainable development in conditions of high uncertainty.

Feedback from participating students, as well as expert assessments from lecturers, international partners and invited practitioners (representatives of government agencies, associations and businesses) clearly confirmed the effectiveness of the chosen methodology, which is an integrative combination of:

- theoretical analysis of strategic approaches and concepts of adaptive management,
- detailed analysis of real cases of Ukrainian communities, enterprises and infrastructure restoration projects,
- study of successful European practices,
- practical modelling of strategic planning scenarios in conditions of limited resources, wartime risks and green rebuilding requirements.

This approach allowed participants not only to learn the theoretical basics, but also to acquire real-world competencies for developing adaptive strategies that take into account economic efficiency, environmental safety, social inclusiveness, and resilience to future crises at the same time.



Figure 3: Selfie of some of the Spring School participants and teachers in Vilnius in May 2025 (© S. Sashuk)



2. Aims & Structure of this Report

This report was prepared as part of the Erasmus+ project '*Transformational Learning Network for Resilience - Enabling Ukrainian higher education to ensure a sustainable and robust reconstruction of (post-war) Ukraine*' (TransLearnN), project number: 2023-1-DE01-KA220-HED-000157119. The project is funded by the *Erasmus+ Cooperation Partnerships* programme and coordinated by the Eberswalde University for Sustainable Development (HNEE, Germany) with the participation of 7 Ukrainian universities (ZPSU, KhNAHU, NTU, NUOS, OSENU, PSTU, UNFU) and European partners (PRZ, TUL, Vilnius Tech).

The report covers the development, implementation, and pilot testing of the course '*Strategic Adaptive Management for Sustainable Reconstruction and Restoration*' (C1) as part of Work Package WP4: Course Development. This package is a key component of the project as it focuses on the creation of transformative educational courses that combine theory with practice to prepare specialists for the challenges of Ukraine's post-war recovery. The topic of the report is important because the discipline of '*Strategic Adaptive Management for Sustainable Reconstruction and Restoration*' focuses on the development and implementation of flexible management strategies that enable organisations, communities and government agencies to ensure economic efficiency, environmental safety and social inclusion in the context of post-war recovery at the same time. The report is integrated into the project as a WP4 documentation tool, based on the results of diagnostics (WP2: Diagnostics), network development (WP3: Network Development) and knowledge dissemination (WP5: Dissemination), which generally strengthens the capacity of Ukrainian higher education for sustainable transformational learning.

Overview of the section structure and logic

The report is structured for a logical transition from a general overview to a detailed analysis

and conclusions, ensuring a consistent disclosure of the process of creating and implementing the course:

- Section 1: **Summary** — provides a concise overview of the course's objectives, key aspects, pilot testing results and practical value, establishing the overall context.
- Section 2: **Aims & Structure of this Report** — defines the objectives of the report and substantiates its structure, linking it to project tasks.
- Section 3: **Methodology & Activities** — describes the methodological approaches, the process of collective development, and learning activities, demonstrating how theory is integrated with practice.
- Section 4: **Description of the course** «Strategic Adaptive Management for Sustainable Reconstruction and Restoration» — provides a detailed overview of the course content, objectives, competencies, learning outcomes, methods and thematic plans, illustrating its practical application.
- Section 5: **Course development** — describes the working group, stages of development, implementation in universities and availability of materials, demonstrating international cooperation.
- Section 6: **Conclusions & Recommendations** — summarises the results, feedback and recommendations, proposing ways for scaling up to strengthen the impact on education and restoration.

The logic of the structure is based on gradual immersion: from an introductory overview (sections 1–2) through methodological and content details (sections 3–5) to synthesis and prospects (section 6), which provides a complete understanding of the course's contribution to the *TransLearnN* project.



3. Methodology & Activities

The area of adaptive ecosystem management and biodiversity conservation is actively developing in Ukraine, which indicates the integration of global scientific approaches into national environmental protection practices.

The process of creating the discipline ‘Strategic Adaptive Management for Sustainable Restoration and Reconstruction’ took place in the mode of inter-university cooperation with the participation of representatives of all partner universities of the TransLearnN project. It began with Training for Trainers at Rzeszów Polytechnic (Rzeszów, Poland) in June 2024.



Figure 5: Formulation of the main methodological directions for the course development at the meeting of trainers.

A methodological peculiarity of the course was the initial training of teaching staff on the course ‘Adaptive Ecosystem Management’, which began in the summer of 2024 as part of the TransLearnN project

(<https://ukrdigital.hnee.de/course/view.php?id=26>). This course brings together professionals from various fields to preserve the environment, teaching them *Open Standards for the Practice of Conservation* (Conservation Standards <https://www.conservationstandards.org/>)

developed by the *Conservation Measures Partnership* (CMP) and developing environmental projects based on this methodology. The educators completed both a theoretical online course conducted by Yulia Nikitchenko and workshop sessions conducted by Angela Dichte using interactive technologies via the Miro online board in order to practice the use of the methodology.

The educators learned from their experience the specifics of using the Conservation Standards and applying them in specific projects. This training allowed them to better understand and plan actions for developing the course ‘Strategic Adaptive Management for Sustainable Reconstruction and Restoration’ and its practical implementation.

In conditions of high complexity, uncertainty and dynamic changes in the environment, a systematic approach that interprets

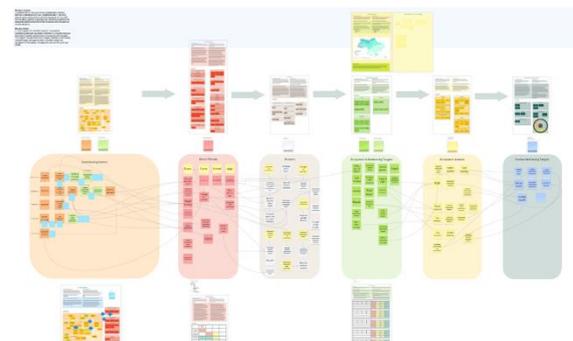


Figure 4: Part of Miro board that was used during the workshop with the educators for practicing the Conservation Standards methodology



management decisions as controlled experiments becomes particularly essential. It is this approach that allows for continuous learning from results, rapid strategy adjustments and significant improvements in the quality of future management. This is the essence and core of adaptive management (AM).

The methodological basis of the project is based on a transdisciplinary approach that involves the integration of various scientific disciplines (ecology, management, economics, etc.) for a holistic understanding of the challenges of sustainable development, the involvement of practitioners and experts from various sectors in the joint creation of knowledge, the active participation of students as equal partners in all work packages, and cooperation with UNESCO biosphere reserves as learning sites for sustainable development. The emphasis in developing the course is on teamwork, with the team members including specialists from various fields and interested parties, such as environmental specialists, managers, economists and even local residents. An interesting feature of the project team's work based on Open Standards is that participants take into account what part of the work has already been completed, what stage of implementation the process is at, and use existing information as input data for applying conservation standards. If any clarifications are needed in later cycles, they can go back to the previous ones and add the adjustments to get more detailed information on the project implementation situation.

The discipline **‘Strategic Adaptive Management for Sustainable Reconstruction and Restoration’** was created specifically to provide future specialists — managers, ecologists, specialists in land and infrastructure restoration — both a solid conceptual foundation and specific practical tools for effective work in conditions of constant uncertainty and multiple crises.

The course helps to move from traditional, rigidly determined, linear approaches to flexible, iterative and adaptive strategies that:

- take into account the real complexity of the post-war context,
- allow you to quickly learn from mistakes and successes,
- ensure the sustainability and effectiveness of decisions in the process of long-term ‘green’ recovery and reconstruction of Ukraine.

Thus, the discipline prepares specialists not only to manage in conditions of uncertainty, but also to actively use this uncertainty as a source of learning and improving sustainable development strategies.

The working group had regular online meetings every three weeks starting from September 2024. The developers discussed the course format, the structure of the teaching materials, presentation materials, topics, structural and logical framework, and all current issues that arose during the development process. They also discussed the methodological content that had already been created and its logical presentation.

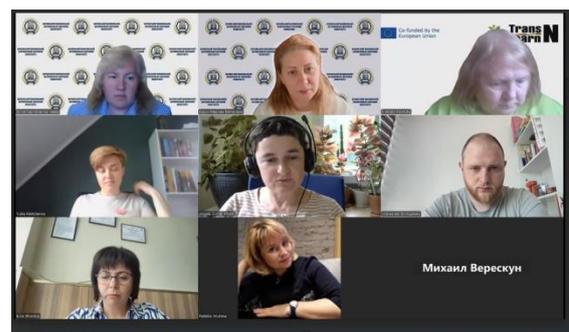


Figure 6: Online work of the working group on the course

The team of the course developers included:

- Angela Dichte, Yuliia Nikitchenko, Eberswalde University for Sustainable Development (Eberswalde, Germany);
- Vaida Šrevičienė, Vilnius Gediminas Technical University (Vilnius, Lithuania);
- Maryna Barun, Nataliia Vnukova, Kharkiv National Automobile and Highway University (Kharkiv, Ukraine);



- Nataliia Horidko, Viktoriia Khrutba, Roksolana Lysak, National Transport University (Kyiv, Ukraine);
- Nataliia Magas, Ganna Trokhymenko, Admiral Makarov National University of Shipbuilding (Mykolaiv, Ukraine);
- Veronika Prykhodko, Odesa Mechnikov National University (Odesa, Ukraine);
- Yuliia Shvediuk, Ukrainian National Forestry University (Lviv, Ukraine);
- Volodymyr Ustytenko, Ruslana Valerko, Zhytomyr Polytechnic State University (Zhytomyr, Ukraine);
- Mykhailo Vereskun, «Pryazovskiy State Technical University» (Mariupol, Ukraine).

During online meetings and discussions, responsible persons were identified, requirements for methodological support of the course, syllabus form, format of lecture and presentation materials, practical work, number of test questions for each module were developed and posted on Google Drive for free access by all teaching staff. Subsequently, when implementing the course in the educational process of each Ukrainian participant university, these materials were used to form resource courses and posted on university platforms.

After all the course materials had been finalised, an e-learning course was created on the platform of **Ukrainian-German Digital Teaching Network** (<https://ukrdigital.hnee.de/>)



Figure 7: The course on the Ukrainian-German Digital Teaching Network platform

Students can find out about each stage of the course:

- Step 1. ASSESS: Scope, Vision & Biodiversity Targets
- Step 1. ASSESS: Target Viability Assessment
- Step 1. ASSESS: Threats, Stresses & Threat Rating
- Step 1: ASSESS: Contributing Factors & Stakeholder Assessment
- Insights from Sectors: Problems Statement
- National Recovery Plan: Introduction
- Step 2. PLAN: Strategy Development
- Step 2. PLAN: Theory of Change
- Step 2. PLAN: Operational Planning
- Post Course Survey

The course is available on the *TransLearnN* platform in the section **Sustainable Development in Learning, Teaching and Research**. (<https://ukraine-oss.com/translearnn/>).

The first stage of the course consisted of online lectures, where participants were introduced to the methodology of applying Open Standards, learned about the current state of Ukraine's main economic sectors, and had the opportunity to work with innovative tools: the Miro online board for collaborative work and the Miradi platform for managing environmental projects. Despite the initial difficulties in mastering these tools, their use significantly increased the effectiveness of group work and project planning.

The *Miradi* platform (<https://www.miradishare.org>) was used as an indispensable tool for project management, integrating the functions of flowcharts, spreadsheets, and accounting tools. This allowed teams to effectively manage project activities by providing access to consistent, accurate, and up-to-date information. *Miradi* supports all stages of the project management cycle in accordance with Conservation Standards.



The structure and composition of the course combines theoretical training and practical work in a group format. In accordance with the Conservation Standards methodology, the course consists of five main stages:

1. Situation analysis, which included identifying and assessing the status of key biodiversity sites, as well as the causes of their deterioration, such as human activity, wars and the effects of climate change;
2. Planning stage, during which 'intervention points' were identified for the development of effective restoration strategies;
3. Commencement of implementation through the creation of an effective partnership network, as well as a preliminary schedule and budget.
4. Analysis, management and adaptation. This stage involves continuous monitoring and evaluation of the project's implementation results. Participants collect data on the effectiveness of the strategies applied, analyse them and make the necessary adjustments. The main goal of this stage is to learn from experience and adapt management to changes in order to maximise the positive impact on nature conservation sites. This is a key element of adaptive management.
5. Dissemination of results. In this final stage, teams share their experiences, successes and failures with other professionals, stakeholders and the wider community. Disseminating knowledge promotes the development of collective practice, prevents duplication of effort and increases the overall effectiveness of conservation projects around the world.



Figure 9: Five-stage Open Standards management cycle



Figure 8: Introduction to the Miradi platform

When performing practical work and developing projects, all applicants were divided into subgroups and learned teamwork.

The second stage took place from 2 to 17 May 2025 at Vilnius Gediminas Technical University, where the *TransLearnN* Spring School 'Strategic Adaptive Management for Sustainable Reconstruction and Restoration' was held.

The spring school is co-funded by the EU under the *Erasmus+ Cooperation Partnerships* programme. The aim of the event was to test the newly introduced training module for students and to train educators from Ukraine to teach this course independently at their universities. More than 20 Ukrainian and Lithuanian students and ten educators from Ukraine, Lithuania and Germany participated in the programme.

International teams refined their project models, turning them into practical plans using coloured paper, markers and adhesive tape. This stage was devoted to the creative development of projects through the creation of theories of change and the beginning of fine-tuning measures to ensure effective impact. The result of the work was the formation of four pilot projects for different natural areas of Ukraine – the Carpathians, Polissya, Forest-Steppe and Steppe. These initiatives include the creation of recreational and educational spaces for the rehabilitation of veterans, campaigns to raise environmental awareness, a plan to finance the demining of agricultural land, and measures to preserve aquatic biodiversity. All teams successfully presented their work.





Figure 10: Distribution of students and educators by subgroups



Figure 11: Agenda for the 2-week Spring School VILNIUS (full programme in the Annex)



Impressions from the Spring School



Figure 12: In the classroom



Figure 13: At the group work stations



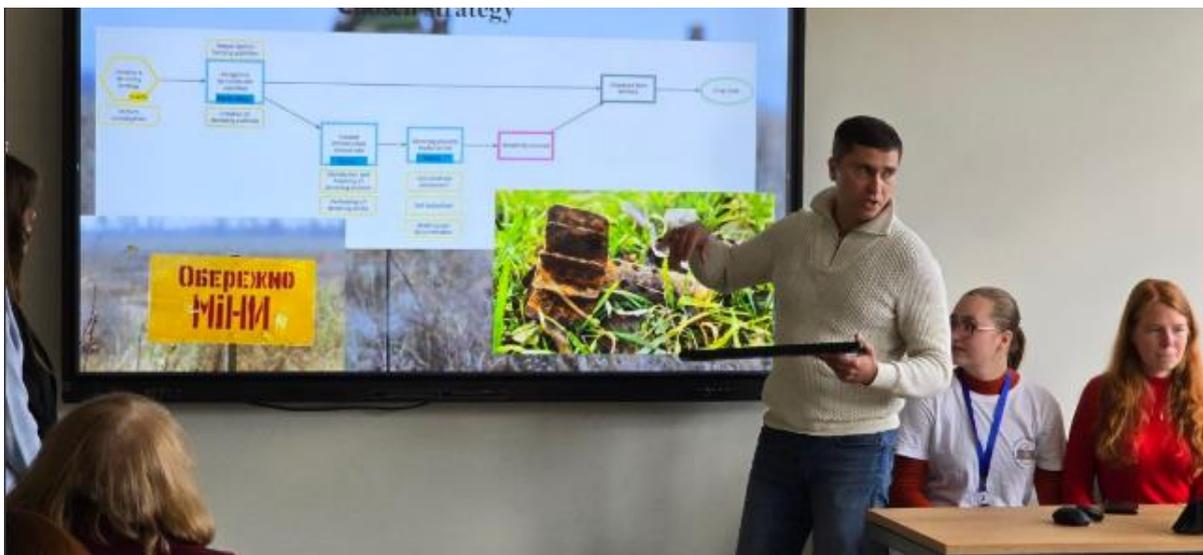
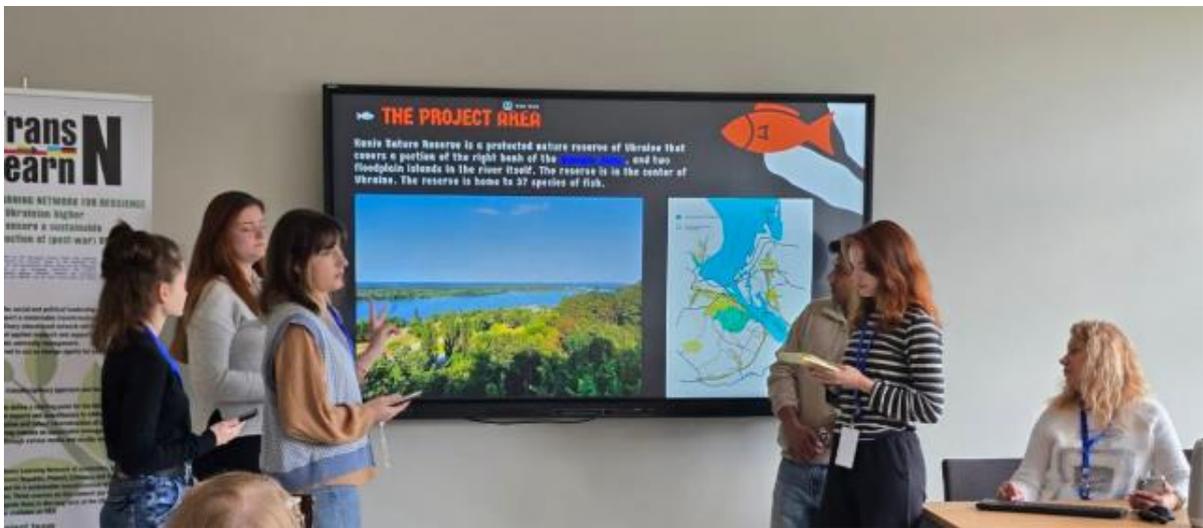


Figure 14: Final group presentations





Figure 15: Certificates of course completion

After mastering all elements of the course, the participants received certificates and completed a questionnaire on the Ukrainian-German Digital Teaching Network platform.

The host of the spring school, Vilnius Gediminas Technical University, held interesting meetings with educators and students, as well as tours of the campus and the city.



Figure 16: Guided tour through the old town of VILNIUS (above) and an introduction to the Miesto Laboratorija (city lab) initiative (below)



Figure 17: Introduction to and tour through the Sustainability Hub of VILNIUS TECH



4. Results

The result of the work of a large international team within the *TransLearnN* project was the development, pilot testing and implementation of the course '*Strategic Adaptive Management for Sustainable Reconstruction and Restoration*' in the educational process of Ukrainian partner universities.

Course Description

The educational goal of the course is to develop practical competencies in adaptive management by introducing students to the concept of Conservation Standards by the *Conservation Management Partnership* (CMP) – an internationally developed and recognised open-source methodology used worldwide for nature conservation and human-nature conflict management.

This course is designed to introduce participants to the principles and practices of strategic adaptive management with a focus on sustainable reconstruction and restoration efforts. It is based on the *Open Standards for Conservation Practice*

(www.conservationstandards.org) and provides practical tools for planning, implementing and adjusting conservation measures in complex and changing environments.

Who is this course for?

This course is designed for students, early-career professionals and practitioners in the fields of natural resource management, restoration, conservation planning, forestry and sustainable land use.

It is also relevant for those involved in the development, implementation or evaluation of restoration projects, or who apply adaptive management in complex ecological contexts.

Learning Goals

- How to apply the Nature Conservation Standards system to real reconstruction and restoration projects.
- How to develop clear goals, situation analysis and strategies using adaptive management principles.
- How to manage complexity, uncertainty and change in conservation and restoration projects.

Innovative tools such as the Miro online board for collaborative work and the Miradi platform for managing environmental projects are particularly valuable. Despite initial difficulties in mastering these tools, their use has significantly increased the efficiency of group work and project planning.

Currently, there are 44 participants registered for the course on the Ukrainian-German Digital Teaching Network platform (<https://ukrdigital.hnee.de/>), including 14 lecturers from Ukrainian universities, the head of work package 4, Nataliia Vnukova, and 39 students.

After successfully completing the course, participants receive a certificate! To receive it, you are required to complete all group assignments, give a final presentation, and fill out a post-course survey.

Course Integration

As part of the grant project, the course has been introduced at seven Ukrainian universities in various specialities, for example:

- Kharkiv National Automobile and Highway University, the course was introduced into the educational process in the spring semester of the 2025-2026 academic year as an elective discipline of professional training in the educational and professional programme '*Environmental Safety*' at the III level of PhD, based on the results of the selection, the discipline was



chosen by 3 students (<https://dl2022.khadi-kh.com/course/view.php?id=6316>), the link to the syllabus in the catalogue of elective courses is provided (<https://surl.li/naunhg>);

- *Ukrainian National Forestry University (Lviv, Ukraine)* The discipline is included in the curriculum (https://drive.google.com/file/d/1UWmXAYVGyawybOgN89bT_LVtOmosaFXd/view) of the D3 'Management' educational and professional programme of the second (master's) level of higher education (<https://drive.google.com/file/d/137poxPSI0HX6bF4tYrf-XkbvzzdHJ7fa/view>) as an elective discipline for two educational trajectories: 'International Management' and 'Organisational Management and Administration'.
- *Odesa I.I. Mechnikov National University (Odesa State Environmental University (Odesa, Ukraine))*, the course is included in the catalogue of elective disciplines (<https://onu.edu.ua/uk/structure/faculty/fges/navchalni-materialy-fges>);
- *State Higher Education Institution «Pryazovskiy State Technical University» (Mariupol, Ukraine)*, the course is included in the catalogue of elective disciplines ([Загальний університетський каталог.pdf - Google Диск TransLearnN - ДВНЗ «ПДТУ»](#));
- *National Transport University (Kyiv, Ukraine)*. The course has been introduced at the bachelor's and master's levels of higher education. The link to the catalogue of elective disciplines: http://vstup.ntu.edu.ua/vybir-univer-mizhnarodni_proekty.pdf . The link to the course: <https://do.ntu.edu.ua/course/view.php?id=1138>
- *Admiral Makarov National University of Shipbuilding (Mykolaiv, Ukraine)*. The link to the course: <https://moodle.nuos.edu.ua/course/view.php?id=277>. The link to the catalogue of

elective disciplines:
https://nuos.edu.ua/wp-content/uploads/2025/04/RP_Strategichnij-adaptichnij-menedzhment-2024.pdf

This course was also piloted in a self-study format for students at Ukrainian universities who were interested in its content and thematic focus.

In order to provide wider access and familiarisation with the content of the educational course, the team of Kharkiv National Automobile and Highway University developed a presentation album consisting of 470 slides covering all modules of the course and placed it in the library repository with free access:

<https://dspace.khadi.kharkov.ua/handle/123456789/26976>

With the *Ukrainian-German Digital Teaching Network (DTN)* platform, there is cross-project collaboration, the course '*Strategic Adaptive Management for Sustainable Recovery and Reconstruction*' is open to a wide audience and can be used for informal education in Ukrainian universities, taking into account the 22 universities involved in the Ukrainian-German Digital Teaching Network project and the 7 Ukrainian universities that participated in the TransLearnN project. In addition, since the course is available on the platform, it has become accessible to a wider circle of educators. The course is available in open mode and can be used by any educator and any student after self-registration (<https://ukrdigital.hnee.de/course/view.php?id=37>)

There was an anonymous survey among the students who took the online course and went to the spring school in Vilnius. The questions were pretty diverse, both open and closed, to figure out how satisfied they were or what they thought could be better in terms of the course content, teaching quality, info availability, and so on. The responses of the students were also quite interesting; they sincerely and openly expressed their opinions, both in the anonymous survey and in face-to-face



communication, which is a very important and valuable element in improving the final product.

Feedback from Students

In the following we present an extract of most relevant answers for the revision process.

Survey question 1:

"Which topics or discussions were you missing and would you suggest to include in the course?"

Overall Satisfaction

- *"Everything suited me."*
- *"In my opinion all is very good."*
- *"Everything is fine"*
- *"Everything was great!"*
- *"I think nothing missing maybe"*

Intensity and Clarity

- *"a little **more practical instructions**. The course is very useful, comprehensive and I'm glad to be here! Thank's! Ačiū! Vielen Dank! Дякую!)"*
- *"The time is very limited so for better result I will suggest to make online session less and offline time more."*
- *"perhaps you should devote more time to group work."*
- *"It was really hard to understand the methodology at the start. I get that it's a common situation, but i would like to add more examples of different visions, scopes etc. Because it's not that we don't know what our project will be about at the start, but that can't understand what vision is in general (my experience)."*
- *"At the beginning of the project, show the entire training plan to understand the main task for the participants"*
- *"Maybe more detailed information, not general for some of presentations. What tips should be done in each branch"*
- *"I liked everything about the course, but it was the first time for me such programs, so*

it was a bit difficult, maybe to make a similar course for beginners"

Inclusion / Networking Suggestions

"Another thing which i would like to add to offline part of Spring school in Vilnius is that we didn't have an introduction of universities and students. Of course, during school we talk a lot to each other, but for me starting communication with someone out of the blue can be difficult. And maybe it would have been interesting for Lithuanian students to learn more about Ukraine this way"

Platform Feedback

"I like the Miro board, but it was laggy. Also a little more time to prepare."

Critical/Negative

"I think this project is making a simple task complicated and thorough the project I always wondered what's the point."

Suggestions for Additional Topics

Practical and Case Studies

"I would suggest including more practical offline activities and project-based work. It would also be helpful to add discussions about real case studies of environmental recovery and reconstruction from other countries for comparison and inspiration."

Environmental Topics

- *"Impact of climate change a budget for which the team of calculated."*
- *"The impact of climate change; a budget for which the team can calculate."*

Other Suggested Topics

"Risk management. Communication and team work"



Survey question 2

How could the overall structure and the formats of the course be improved?

Overall Satisfaction

- "No, very good 😊"
- "I liked everything"
- "No, everything was great."
- "I liked everything!👍"
- "In my opinion all is very good"
- "I don't have an idea. Everything suited me."

Critical/Negative

"I think that there are many ways a project could be executed, but this project is limiting and wants us to have only one possible solution. It should focus not on the step by step, but on the final result."

Group Work & Lectures

- *"Maybe make lections not so big, but more informative. Give more time for group work. It gives better understanding of the situation. Other is good."*
- *"I think it's worth devoting more time to group work and spending time together. This will not only bring the groups closer together, but also teach them to understand each other better."*
- *"The structure is good, but it would be nice to have more time for group work"*

Format Preferences (Online / Offline / Hybrid)

- *"it would be more convenient to work in 1 format, either online or offline. But this hybrid system also makes sense to be. So interesting experience!!!!"*
- *"To be more focused on offline will help this course."*
- *"I really like the format of this Spring school. Personally, it was quite complicated for me to work online during first week, but it wouldn't change that because I understand that it's hard to organise all Spring school completely offline"*

Other Aspects

- *"I'd like more practical tasks, more time for them"*
- *"it is possible to make the project longer)"*
- *"Use Kahoot"*

Some students pointed out that they were encountering tools such as the Miro online whiteboard and the Miradi platform for the first time in the learning process, so some needed extra time to master them, and it might be advisable to set aside separate time for a more detailed introduction.

They really enjoyed the group work, joint discussions, discussions of problematic elements and, ultimately, the joint decision-making within the group of students.

Some respondents suggested increasing the number of practical offline project work hours and adding real cases of environmental restoration and reconstruction from other countries to the discussion for comparative analysis and inspiration. The positive aspects included unconventional approaches to problem solving, modern methodology, and teamwork skills.

This interdisciplinary course can help future specialists create their own projects for the reconstruction and restoration of Ukraine. The course pilot implementation confirmed the effectiveness of integrating Conservation Standards into Ukraine's higher education system as a tool for training a new generation of specialists. The results demonstrate the possibility of successfully adapting international standards of nature conservation to the Ukrainian context.

The experience of working in wartime, when the issues of sustainable reconstruction and restoration of ecosystems become critical, is particularly important. The pilot projects developed (creation of recreational spaces for the rehabilitation of veterans, demining of agricultural land, preservation of aquatic biodiversity) have direct practical application for the restoration of Ukraine.



Course Revision

In order to improve the quality and refine the course, a meeting and discussion with non-academic experts was held online on 15 July 2025.

The non-academic experts for the course are:

- Oleksandr Lytvynenko, the Head of Environmental Safety of the Regions of Ukraine;
- Taras Melnychuk, Deputy Director for Scientific Work and International Cooperation of the Chernobyl Radiation and Ecological Biosphere Reserve;
- Anatolii Deyneka, Doctor of Economic Sciences, the Head of the Western Interregional Administration of Forestry and Hunting.

After a detailed study of the structure and content of the course, they expressed their

•

suggestions and comments. The main concluding remarks of the experts were:

- It might be advisable to divide groups in practical work not according to territorial criteria, but according to industry sectors, so that the main emphasis is on economic sectors, which would reinforce the theoretical material developed by teaching staff at Ukrainian universities;
- Lectures should present material using specific examples, reducing the amount of theoretical material.
- The course covers a fairly large amount of material, so when implementing it into the educational process at Ukrainian universities, the number of lectures and practical classes should be maximised, but within the limits of the specified ECTS credits.

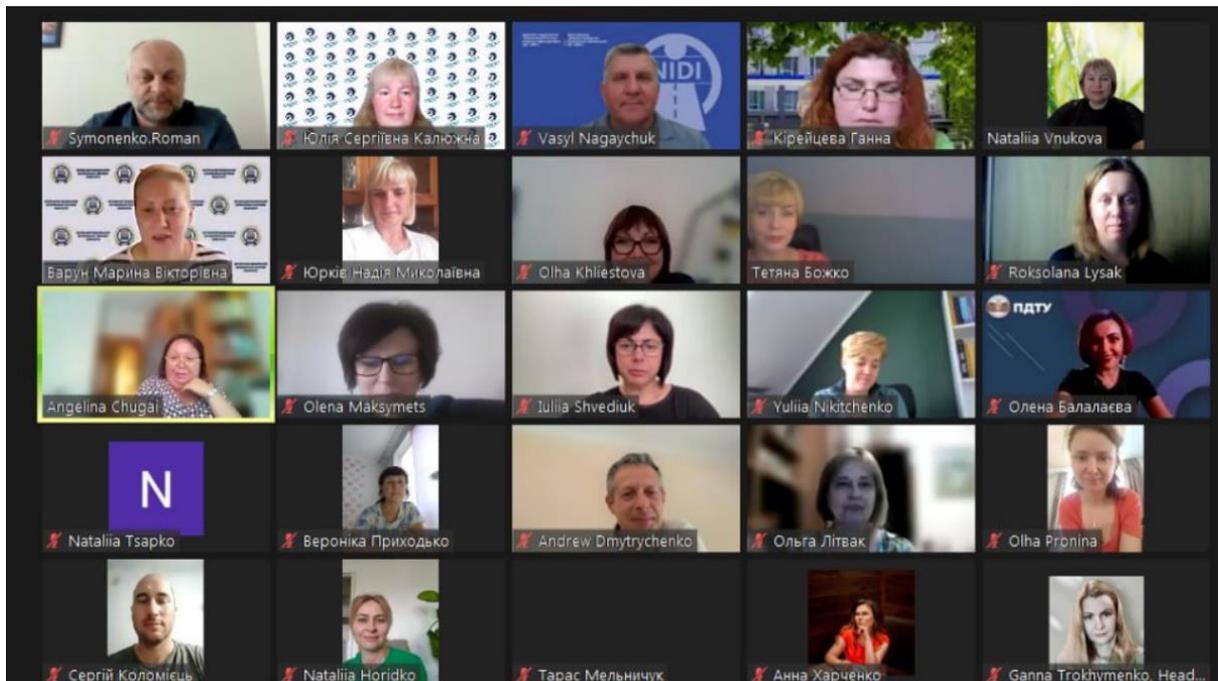


Figure 18: Meeting with non-academic experts



5. Conclusion & Recommendations

Main conclusions

The course successfully integrates Conservation Standards into the educational process, promoting the development of competencies in adaptive management, leadership and interdisciplinary thinking.

The pilot implementation (online + spring school in Vilnius) confirmed its practical value: participants developed real restoration projects (recreational spaces, demining, biodiversity conservation).

The Miro and Miradi tools increased efficiency but require additional training.

The course has been integrated into the curricula of seven universities, and is freely available on the TransLearnN and Ukrainian-German Digital Teaching Network platforms.

Recommendations for further development

Strengthening of the practical component

Increase the time allocated for group work and offline activities (simulations, role-playing games, field trips).

Add an introductory module for beginners to learn how to use the tools (Miro, Miradi).

Enrichment of content

Include post-war recovery case studies from other countries (Germany, Bosnia) with a focus on climate change, project budgets and psychological recovery of communities.

Expand topics including risks, communication and networking for sectors (forestry, water resources).

Optimising formats

Balance online/offline: reduce theoretical lectures, add interactivity.

Form groups by industry sectors to strengthen the economic focus.

Scaling

Provide open access for informal education.

Integrate as a compulsory discipline at PhD level, adapting to ECTS credits.

Hold regular meetings with non-academic experts to update content.

All recommendations have been taken into consideration for implementation at universities. The course is a significant contribution to Ukraine's green recovery.



Figure 19: During the Spring School in Vilnius, May 2025



Appendix

Course 1 Spring School programme



Trans Learn

Spring School

Strategic adaptive management for sustainable reconstruction and restoration

WEEK 1 - Online session programme - 2 – 8 May, 2025

| Friday, May 2 | Topic, activity | Presenter |
|----------------------|--|--------------------|
| 16:00 – 16:15 | Introduction to the TransLearnN project | Angela |
| 16:15 – 16:30 | Introduction to the course (aim, mode of operation) short round of introductions (get-to-know each other) | Angela |
| 16:30 – 17:15 | Introduction "Theoretical and methodological approaches to the definition of the concepts of "sustainability" and "adaptive management" | Iuliia Shvediuk |
| 17:15 – 17:30 | <i>Break</i> | |
| 17:30 – 18:00 | Introduction to Conservation Standards | Yuliia Nikitchenko |
| 18:00 – 18:15 | MiradiShare setup support and groups formation | Angela |
| Monday, May 5 | | |
| 16:00 – 16:10 | Check-in and recap about groups | Angela |
| 16:10 – 16:20 | Introduction to Miradi Share | Angela |
| 16:20 – 16:50 | Step 1. ASSESS: (Short presentation+instructions) 1.1 Scope, Vision & Biodiversity Targets | Yuliia Nikitchenko |
| 16:50 – 17:30 | Group Work 1.1.: <i>Define scope and vision & Biodiversity Targets</i> | all |



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Figure 20: Spring School programme per day (this page and the following)



| | | |
|-------------------------|--|---------------------|
| 17:30 – 17:45 | <i>Break</i> | |
| 17:45 – 18:05 | Step 1. ASSESS: (Short presentation+instructions) 1.2 Ecosystem Services and Human Wellbeing targets | Yuliia Nikitchenko |
| 18:05 – 19:00 | Group Work 1.2.: <i>Identify Ecosystem Services & Human Well-being Targets</i> | all |
| Tuesday, May 6 | | |
| 16:00 – 16:20 | Step 1. ASSESS: (Short presentation+instructions) 1.3 Viability Assessment | Yuliia Nikitchenko |
| 16:20 – 16:40 | Insights from the Sectors Current State of Forestry in Ukraine | Iuliia Shvediuk |
| 16:40 – 17:15 | Group Work 1.3.: <i>Include the information about the forestry sector in the situation model</i> | all |
| 17:15 – 17:30 | <i>Break</i> | |
| 17:30 – 18:00 | Insights from the Sectors Navigating Challenges: Conditions Shaping Sustainable Agriculture in Ukraine | Volodymyr Ustymenko |
| 18:00 – 19:00 | Group Work 1.4.: <i>Include the information about the agriculture sector in the situation model</i> | all |
| Wednesday, May 7 | | |
| 16:00 – 16:30 | Step 1. ASSESS: (Short presentation+instructions) 1.4 Stresses, Direct Threats, Threat Rating | Yuliia Nikitchenko |
| 16:30 – 17:00 | Insights from the Sectors Sustainable development of energy systems in the context of post-war reconstruction: main challenges | Mykhailo Vereskun |
| 17:00 – 17:45 | Group Work 1.5.: <i>Include the information about the energy sector in the situation model</i> | all |
| 17:45 – 18:00 | <i>Break</i> | |
| 18:00 – 18:30 | Insights from the Sectors Sustainability challenges in water management in the context of post-war recovery | Ganna Trokhymenko |
| 18:30 – 19:00 | Group Work 1.6.: <i>Include the information about the water management sector in the situation model</i> | all |
| Thursday, May 8 | | |

| | | |
|---------------|---|--|
| 16:00 – 16:20 | Step 1. ASSESS: (Short presentation+instructions) 1.5 Contributing factors, Stakeholder assessment | Yuliia Nikitchenko |
| 16:20 - 16:40 | Insights from the Sectors Challenges in the waste management system of Ukraine | Veronika Prykhodko |
| 16:40 – 17:00 | Group Work 1.7.: <i>Include the information about the waste management sector in the situation model</i> | all |
| 17:00 - 17:15 | <i>Break</i> | |
| 17:15 – 17:35 | Insights from the Sectors Current state of transport systems in Ukraine | Nataliia Horidko / Viktoriiia Khrutba |
| 17:35 – 18:00 | Insights from the Sectors Current state and challenges in the road construction industry | Maryna Barun |
| 18:00 – 18:30 | Group Work 1.9.: <i>Include the information about the transport system sectors in the situation model</i> | all |
| 18:30 – 19:00 | Reflection & Feedback + clarification of logistical questions | Angela & Vaida |

WEEK 2 - On-site session programme, Saulėtekio al. 11, Vilnius - 12 – 16 May, 2025

| Monday, May 12 | Topic, activity | Presenter, place |
|-----------------|---|--|
| 9:00 – 9:30 | Introduction, Recap and Agenda | Saulėtekio al. 11D, Vilnius, S5–102 aud. |
| 9:30 – 10:00 | Group building game: Strengths and skills | Vaida Šerevičienė Saulėtekio al. 11D, Vilnius S5– 102 aud. |
| 10:00 - 10:15 | Welcome speech. | Vice rector of VILNIUS TECH. Adas Meškėnas |
| 10:15 – 11:15 | <i>Coffee break followed by an excursion through the Sustainability HUB</i> | Raimondas Grubliauskas |
| 11:15 – 12:30 | Group Work Instructions (10min) Group Work 1.10.: Transfer of week 1 results (on paper?) and completion of situation analysis | Angela Saulėtekio al. 11D, S5–102 aud. Group 1 – S4–001 Group 2 – S4–006 Group 3 – S4–007 Group 4 – S4–007 |
| 12:30 – 13:30 | Lunch - 12 Restoranas | Saulėtekio al. 9, Vilnius |
| 13:30 – 15:00 | Group Work 1.11.: Map the main stakeholder groups into the model and completion of situation analysis | Saulėtekio al. 11D, Group 1 – S4–001 Group 2 – S4–006 Group 3 – S4–007 Group 4 – S4–007 |
| 16:00-18:00 | Vilnius Old Town Tour | |
| 18:00 | Welcome Dinner, ETNO Dvaras | Pilies g. 16 |
| Tuesday, May 13 | Topic, activity | Presenter, place |
| 9:00 – 9:15 | Recap and Agenda | Saulėtekio al. 11D, S5–102 aud. |
| 9:15 – 9:45 | National Reconstruction Plan of Ukraine presentation | Viktoriiia Khrutba |
| 9:45 – 10:30 | Step 2. PLAN (Short presentation+instructions) 2.1 - Developing strategies and activities. - Strategy prioritization | Angela Saulėtekio al. 11D, |

| | | |
|--------------------------|--|---|
| | | S5-102 aud. |
| 10:30 – 10:45 | <i>Break</i> | |
| 10:45 – 12:30 | Group Work 2.1.: <ul style="list-style-type: none"> • <i>Identification of entry points for the strategic plan</i> • <i>Brainstorm and initial formulation of strategies for the entry points</i> | Saulėtekio al. 11D, Group 1 – S4-001 Group 2 – S4-006 Group 3 – S4-007 Group 4 – S4-007 |
| 12:30 – 13:30 | <i>Lunch, 12 Restoranas</i> | Saulėtekio al. 9, Vilnius |
| 13:30 – 14:30 | Step 2. PLAN (Short presentation+instructions) 2.2 Theory of Change – Results Chains | Angela Saulėtekio al. 11D, S5-102 aud. |
| 14:30 – 16:00 | Group Work 2.2.: <ul style="list-style-type: none"> • <i>Selection of strategies based on strategy rating</i> • <i>Development of Results Chains / Webs</i> | Saulėtekio al. 11D, Group 1 – S4-001 Group 2 – S4-006 Group 3 – S4-007 Group 4 – S4-007 |
| Wednesday, May 14 | Topic, activity, place | |
| 9:00 – 9:15 | Recap and Agenda | Saulėtekio al. 11D, S5-102 aud. |
| 9:15 – 10:15 | Step 2. PLAN (Short presentation+instructions) 2.3 Operational planning <ul style="list-style-type: none"> • <i>Goals and Measurable objectives and indicators</i> • <i>Partner setting and sustainability of the project</i> • <i>time planning & budget</i> | Saulėtekio al. 11D, S5-102 aud. |
| 10:15 – 10:30 | <i>Break</i> | |
| 10:30 – 12:30 | Group Work 2.3.: <ul style="list-style-type: none"> • <i>Formulation of goals</i> • <i>Developing Objectives and Indicators</i> • <i>Partner setting</i> • <i>time plan & budget</i> | Saulėtekio al. 11D, Group 1 – S4-001 Group 2 – S4-006 Group 3 – S4-007 Group 4 – S4-007 |
| 12:30 – 13:30 | <i>Lunch - 12 Restoranas</i> | Saulėtekio al. 9, Vilnius |
| 13:30 – 16:00 | <i>Continue group work</i> | Saulėtekio al. 11D, Group 1 – S4-001 Group 2 – S4-006 Group 3 – S4-007 Group 4 – S4-007 |
| Thursday, May 15 | Topic, activity, place | |

| | | |
|-----------------------|--|---|
| 9:00 – 9:15 | Recap and Agenda | Saulėtekio al. 11D, S5–102 aud. |
| 9:15 – 10:30 | <i>Continue group work</i> | Saulėtekio al. 11D, Group 1 – S4–001 Group 2 – S4–006 Group 3 – S4–007 Group 4 – S4–007 |
| 10:30 – 11:00 | Travel to the site by public transport | |
| 11:00– 12:00 | <i>Excursion to Miesto Laboratorija – a sustainable community space for ecological innovation and education in Sapieha Park, Antakalnis, Vilnius</i> | Antakalnio g. 17-13, Vilnius |
| 12:00 – 13:00 | Lunch - Miesto Laboratorija | Antakalnio g. 17-13, Vilnius |
| 13:30 – 16:00 | <i>Continue group work</i> | Saulėtekio al. 11D, Group 1 – S4–001 Group 2 – S4–006 Group 3 – S4–007 Group 4 – S4–007 |
| Friday, May 16 | Topic, activity, place | |
| 9:00 – 9:15 | Recap and Agenda | Saulėtekio al. 11D, S5–102 aud. |
| 9:15 – 10:30 | Presentation of results | |
| 10:30 – 10:45 | <i>Break</i> | |
| 10:45 – 12:00 | Presentation of results | |
| 12:00 – 12:30 | Post-course survey & certificates | |
| 12:30 – 13:30 | Lunch - 12 Restoranas | Saulėtekio al. 9, Vilnius |
| 13:30 – 15:00 | <i>free time</i> | |
| 17:00 | Final Dinner - Bernelių Užėiga | J. Lelevelio g. 6, Gedimino pr. 19, 01103 Vilnius |

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