

Syllabus

Course Title

Climate justice: the impact of climate change on vulnerable social groups

General Information

General description of the required education/training, outlining the main objectives and explaining the necessity of the education/training at the organizational/country/regional level

The course “*Climate justice: the impact of climate change on vulnerable social groups*” is part of the professional cycle of disciplines for master’s training under the “*Climate Service*” program.

The main objective of the course is to develop in participants an understanding of the disproportionate impact of climate change on marginalized communities and to build action-oriented skills to promote a fair and sustainable future. This involves critically examining the historical, social, and economic roots of climate change and taking local-level action for systemic change.

Climate justice views global warming as an ethical and political issue rather than only an environmental one. The most vulnerable and poorest segments of society often suffer the consequences of climate change, despite contributing least to the emissions that caused the climate crisis. Climate justice recognizes the need to take into account fairness in the often disproportionate impacts of climate change on citizens and communities.

Climate justice is a concept that can appear both large-scale and complex. It involves responding to and preparing for the impacts of climate change in a way that protects communities and the country, ensuring that no one is left behind. While this may seem simple, achieving true climate justice requires much deeper consideration of social, environmental, and cultural factors.

Gender, racial, class, ethnic, disability, and intergenerational justice are essential for the true achievement of climate justice.

Audience

The main target audience of the course and any secondary audience, if it may influence decisions regarding the structure or content of the course

Expected level of knowledge and skills of the main audience (current or minimally required), as well as other factors (for example, cultural characteristics, level of technical training, access to the Internet) that should be considered when planning the course, as they may affect the choice of teaching methods, materials, and approaches to interaction with the audience

The main target audience consists of master’s students of higher education institutions in Ukraine pursuing education in the field of climate services.

The course may also be used for educational and outreach purposes to engage a broad audience without a background in natural sciences.

Level of knowledge and skills of the main audience:

Current level of knowledge:

The audience should possess basic knowledge in the natural sciences, particularly in atmospheric physics, climatology, and ecology.

The audience should also have minimal knowledge of sociology, political science, and psychology.

Cultural characteristics:

Education on climate change should be aimed at developing a climate culture among all segments of the population, emphasizing the importance of considering socio-cultural dynamics in different regions for the development of effective and culturally appropriate strategies and policies to address climate change risks.

Level of technical preparation:

Course participants should possess computer skills, be able to use the Internet, and work with various interactive platforms.

English language proficiency:

An intermediate level of English proficiency (B1 or higher) is recommended for working with literature sources and global databases.

Information accessibility:

The presentation and delivery of course materials предусматривают conditions under which people, regardless of their functional impairments or communication abilities, have access to information in various formats and through technologies that take into account their needs and capabilities.

Internet access:

The course provides diverse forms of material presentation for use in both online and offline modes.

Competencies

Training needs at the individual or organization/country/regional level, as well as a description of how these needs were identified and recognized as relevant.

Competencies targeted by the training.

C5. Ensure continuous and effective communication with end users/stakeholders to identify and select the best solutions for the economy and society as a whole.

C6. Assess and develop climate change action plans and resilience strategies, including analysis of successful examples, development of adaptation strategies, and integration of climate justice principles to ensure equitable and effective outcomes.

Learning outcomes and performance criteria

Learning outcomes and performance criteria formulated with regard to the knowledge and skills to be acquired during the training process.

Performance criteria:

- Conduct a comprehensive analysis using case studies and real data to determine and explain the impact of sociocultural norms, economic inequalities, and access to resources on the vulnerability of specific gender groups.
- Develop and propose targeted adaptation strategies focused on the unique needs of vulnerable gender-specific groups, assessing their effectiveness and feasibility through scenario analysis and stakeholder feedback.

Learning outcomes:

LO3. Assess how gender factors influence the vulnerability of different individuals and groups, including consideration of the impact of sociocultural norms, economic disparities, and access to resources on the ability to respond to climate risks. (GVPG).

LO4. Develop and propose adaptation strategies that take into account the unique needs of vulnerable gender groups, ensuring inclusive and equitable approaches to strengthening resilience and resource distribution. GVPG.

Course Content



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Provide a content outline that corresponds to the learning objectives and outcomes. This may be a course outline as it will be presented to students, but not necessarily a complete curriculum.

Include a general list of all topics that you consider necessary to cover. If you believe it would help clarify the scope, indicate what will NOT be covered.

Module 1: Analysis of gender-specific vulnerabilities

1. The concept of climate justice
2. Gender and climate change

Module 2: Development of targeted adaptation strategies

1. Climate threats. Just adaptation
2. Inclusivity in climate change
3. Women and climate justice
4. Climate change adaptation strategies in Ukraine

Learning Solutions and Methods of Implementation

List the learning solutions (teaching methods) that will be used and explain why they were chosen. For example: classroom learning, online learning, blended learning, workplace learning, online resources for self-study, coaching or mentoring, etc.

Learning solutions:

Formal learning. It is expected that course participants will achieve predefined learning outcomes and acquire specific skills and competencies. It takes into account the baseline level of skills and allows for pacing in a distance learning mode.

Teaching methods:

For this course, distance learning (asynchronous mode) is proposed, using online technologies.

Distance learning makes the educational process more flexible and accessible, which is especially important in the current security situation in Ukraine. This format provides the opportunity to study in a convenient place and at a convenient time.

Online learning elements involve direct interaction between the instructor and course participants, or among participants during classes – consultations, seminars, etc. can be conducted in a live online format.

Online tools also allow reaching a significantly larger audience, which is directly related to the specific purpose of the course, namely advocacy and education in the field of climate education among the general population.

The use of modern technologies such as automated assessment systems and feedback, as well as wide access to literature databases, helps improve the quality of the learning process.

Learning Strategies

Consider which learning strategies you will use. Provide justification for why you intend to apply them, including reasons why they will help participants achieve the planned learning outcomes.

Combine different learning strategies to create a diverse learning environment that accommodates different learning styles of participants. This will increase the effectiveness of learning and help achieve the planned learning outcomes. This section does not require a detailed description of specific activities.

1. *Traditional lecture-based teaching method.*
2. *Discussion strategy* focused on the exchange of opinions (proposals) among course participants. Conducted online. Asynchronous voice discussions are proposed, allowing extended reflection on problematic issues or situations.
3. *Elaboration strategies* – aimed at establishing connections between what the learner already knows and what they are trying to learn. Integrating new knowledge with existing knowledge into an organized whole promotes faster recall of information and improves understanding of the material.
4. *Project-based learning.* Used for practical assignments.
5. *Motivation strategy.* Development of reflection on current achievements and motivation toward future prospects, etc.

Learning Activities

Describe the main learning activities that will be included, such as lectures, readings, case studies, discussions, exercises, practical assignments, simulations, role-playing games, etc.

Also describe the roles of instructors and students during these activities.

The course consists of lectures and practical sessions – contact hours, which account for 40% of the total course workload, and independent work by participants – 60% of the total course workload. The course includes 2 modules; each module provides 12 academic hours, while independent work accounts for 18 hours.

Main learning activities:

1. *Lectures.* The course consists of 2 lectures, each containing several related topics.
 - Module 1. Lecture 1 introduces participants to the problem of climate justice and the identification of vulnerable population groups in relation to climate change.
 - Module 2. Lecture 2 presents approaches to developing adaptation strategies for gender-vulnerable population groups.

Role of the instructor – transferring knowledge and developing competencies.

Presenting in an engaging form current issues related to climate justice.

Stimulating students' creative and independent learning activities.

Motivating participants by emphasizing the importance of their role and real contribution to addressing climate justice issues both personally and in educational outreach for the wider public.

2. *Practical assignment. Project work.*

Task 1. Development of a causal chain for a socially vulnerable group.

Content: Develop a causal chain for a selected socially vulnerable group.

Objective: Understand the cause-and-effect relationships between a climate threat and social consequences for a specific population group.

Task 2. Designing inclusive adaptation measures in cities.

Content: Develop a project of inclusive adaptation measures in a city.

Objective: Develop concrete adaptation solutions that take into account the needs of the most vulnerable population groups through the concept of climate justice.

Practical work allows participants to apply acquired knowledge in real conditions, which contributes to a deeper understanding of the material. In addition, practical sessions develop skills that are difficult to acquire through lectures or reading alone. The tasks involve creating projects for vulnerable population groups on responding to climate risks and identifying adaptation solutions. The role of the instructor is to clearly define the objective, the set of tools and methods for project development, and provide guidance to participants.

3. *Independent work of participants.* This involves systematic work on mastering the course material throughout the entire learning period. It is aimed at developing abilities, activating engagement, continuous knowledge acquisition, self-assessment, and self-organization.

Assessment of Learning

Describe the assessment plan for participants before, during, and/or after the course, including tests, exercises, activities, and projects that will be assessed. Indicate whether self-assessment or peer assessment will be used. Explain how the assessment is linked to the learning outcomes.

For the assessment of participants' knowledge in the course, a modular form of control is used. The course contains 2 modules.

1. *Testing.* The purpose is to consolidate the knowledge acquired by participants during the course, ensure maximum objectivity of assessment, and reduce the time required for processing results. The role of the instructor is to organize the process of monitoring participants' performance. Tests are conducted in a distance format using the e-learning platform. Theoretical tests consist of 20 questions. Assessment system: answers are complete and correct – 90–100%; answers are correct but not complete – 75–89%; answers are not always correct and complete – 60–74%; answers are incorrect or absent – 0–59%. The maximum score for each test is 10 points.
2. *Practical assignment.* The maximum score for each assignment is 20 points. Answers are complete and correct – 90–100%; answers are correct but not complete – 75–89%; answers are not always correct and complete – 60–74%; answers are incorrect or absent – 0–59%.

The course grade is calculated as the arithmetic sum of points for completing all course tasks (accumulated total score).

Storyboard of Learning (Learning Storyboard)

Use this to create a visual scenario of your blended learning activity

Acquisition.

Through reading literature and scientific articles on the course topic, listening to lectures, and viewing presentations and videos. As a result, participants acquire new concepts, terminology, and the methodology of the course subject. Acquisition should be reflective, as participants align newly acquired knowledge with their existing knowledge.

Discussion.

Learning Resources and Tools

List the available resources you will use for different types of learning activities and recommend to students.

Describe the technologies that will be used to implement the learning solutions, including learning technologies and operational equipment (hardware, software, collaborative tools).

Learning Resources

1. Адаптація до зміни клімату. Карпатський Інститут Розвитку, 2015. 40 с.
https://forza.org.ua/sites/default/files/adaptation_climate_change_brochure_ua_screen_final.pdf

2. Боброва А., Хассай Є., Вербицький І. та ін. Кліматична (не)справедливість: вплив зміни клімату на вразливі соціальні групи в містах України. Київ: Представництво Фонду ім. Г. Бьоля в Україні. 2020, 72 с. [https://cedos.org.ua/pdf/Кліматична_\(не\)справедливість.pdf](https://cedos.org.ua/pdf/Кліматична_(не)справедливість.pdf)
3. Стратегія екологічної безпеки та адаптації до зміни клімату на період до 2030 року. Розпорядження Кабмін України. 2021. <https://zakon.rada.gov.ua/laws/show/1363-2021-p#Text>
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13. Gay-Antaki, M. (2020). Feminist geographies of climate change: Negotiating gender at climate talks, *Geoforum*, 115, 1-10. <https://doi.org/10.1016/j.geoforum.2020.06.012>
14. Ha Pham and Marc Saner. A Systematic Literature Review of Inclusive Climate Change Adaption. Sustainability. 2021, 13(19). <https://doi.org/10.3390/su131910617>
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Technical tools / software for implementing learning solutions: Moodle, MS Office.