Syllabus

Course Title

Fundamentals of climate policy (international and national aspects)

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 "Fundamentals of Climate Policy (International and National Aspects)" is one of the core components of the professional cycle of disciplines for master's training within the "Climate Services" program. The course will contribute to the development of analytical skills in the field of environmental/climate law, understanding of states' legal obligations and mechanisms for their implementation, as well as the formation of practical approaches to implementing international norms into national legislation.

The main objective is to provide students with comprehensive knowledge of international and national legislation in the field of climate change, their role in global and national regulation of climate policy; to examine the main international agreements (the Paris Agreement, the Kyoto Protocol, the United Nations Framework Convention on Climate Change), mechanisms for their implementation, as well as Ukraine's legislative initiatives and policies regarding climate change.

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 audience consists of master's students of higher education institutions in Ukraine pursuing education in the field of climate services. The course may also partially be used as a professional development course for specialists in meteorology and climatology, as well as for specialists in other fields where decision-making based on climate information is required. Specialists and civil servants working in the fields of environmental policy, law, or international cooperation. Public activists and experts interested in the implementation of climate policy.

Level of knowledge and skills of the main audience:

Fundamental knowledge:

For successful completion of the course "Fundamentals of Climate Policy (International and National Aspects)," students should possess the following basic knowledge and skills:

Basic understanding of law and international relations.

Climate literacy (general understanding of climate change, its causes, and consequences).

Analytical preparation:

Analytical and research skills (ability to work with legal and regulatory acts and international agreements. Skills in critical thinking and information analysis).

Technical preparation:

Participants should possess basic computer and Internet skills, as well as be familiar with tools used to access interactive learning platforms (for example, Moodle). It is desirable that participants have basic data analysis skills, experience working with presentations, and skills in using analytical tools such as Excel.

English language proficiency level:

An intermediate level of English proficiency (B1 or higher) is recommended for working with international studies, reports, and economic models.

Other factors:

Inclusiveness and accessibility:

During the teaching process, various methods of presenting materials will be used (text, audio, video, interactive tasks). Educational materials will be provided in accessible formats, such as large-print text, audio files, or files compatible with screen-reading software.

Participants will be offered a choice of learning methods that best meet their needs.

Internet access:

The course includes online components, but all materials will be available for download and offline use due to possible limitations in Internet access.

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.

C6. Assess and develop climate change action plans and resilience strategies, including the analysis of successful examples, the creation of adaptation strategies, and the 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 criterion:

PC1. Participate in the development, improvement, and implementation of low-emission solutions that can be implemented by the business community and the public to mitigate climate change.

Learning outcomes:

LO1. Critically evaluate the effectiveness of various climate action plans and strategies, including those outlined in the Paris Agreement, assessing their potential impact at the global and national levels.

LO2. Analyze and synthesize examples of successful climate resilience initiatives from different global contexts, identifying the key factors that contributed to their success, and apply these findings to develop effective resilience strategies for different regions.

Course Content

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: Assessment of Climate Action Plans. Critically evaluate the effectiveness of various climate change action plans and strategies, including those outlined in the Paris Agreement, assessing their potential impact at the global and national levels.

Topics:

Scientific foundations and the development of the international legal framework of the global climate change response system.
Main international climate regulation agreements (international and national levels).
Analysis of the Law of Ukraine "On the Principles of State Climate Policy."

Module 2: Case Studies of Successful Climate Resilience Initiatives Worldwide. Analyze and synthesize examples of successful climate resilience initiatives from different global contexts, identifying the key factors that contributed to their success, and apply these findings to develop effective resilience strategies for different regions.

Topics:

International examples of successful climate adaptation initiatives.
Key success factors of climate initiatives.
Application of the obtained findings to different regions.

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.

For master's students, blended learning should preferably be chosen whenever possible. Considering practical criteria, it can be concluded that with this approach, online learning allows this audience to regulate their study time more easily. Based on educational needs, it can be assumed that master's students are prepared for online learning, as they already possess sufficiently developed self-learning skills, time management skills, and high motivation. However, since rather complex and comprehensive learning outcomes must be achieved, it is desirable that learning be accompanied by direct practical reinforcement of the acquired knowledge, which is best achieved in an offline format.

Master's students are encouraged to meet with the instructor offline 1–2 times per week to discuss the knowledge acquired while reviewing video lectures and other materials, as well as to reinforce and refine their skills and competencies. Online learning, which will mainly take place asynchronously, will be monitored by the instructor through forums for closer discussion of issues arising during the learning process.

At the end of the course, a final assessment of learning outcomes will be conducted.

Considering the current challenging conditions in Ukraine, groups of master's students may be offered asynchronous online learning with the possibility of conducting synchronous activities.

In the case of online learning, the educational needs of master's students can be addressed more effectively than in offline learning, since it is possible to involve more experts in relevant fields who otherwise could not participate due to their workload, which will positively affect the effectiveness of the training. In this case, it is very important to create opportunities for frequent and purposeful communication between the instructor and the master's student, as a deep understanding of various aspects (climatic, economic, etc.) of emerging issues is required, which can only be achieved through close interaction.

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.

During the course delivery, the following learning strategies are planned to be used.

Discussion strategy – will allow participants to develop practical experience in jointly discussing and solving theoretical and practical problems.

Situational analysis strategy – is an important element in the preparation of future climate managers.

Since the course covers both theoretical and practical aspects of climate law, the learning strategies should ensure a balance between knowledge acquisition, analytical thinking, and practical application of the material.

1. Active Learning and Case Analysis

Methods:

- Working with real climate agreements and legislative acts (the Paris Agreement, the Kyoto Protocol, laws of Ukraine).
- Discussions on the effectiveness of international and national measures.

Expected outcome: Development of critical thinking and legal analysis skills.

2. Project-Based Learning

Methods:

- Group work on projects simulating real legal challenges (for example, developing a local climate strategy).
- Preparation of models of legal documents (recommendations, policies, memoranda).
- Presentation of results and discussion of their effectiveness.

Expected outcome: Application of knowledge in practical scenarios, development of teamwork and analytical skills.

3. Discussion Clubs and Debates

Methods:

- Organization of debates on topics such as: “Is the Paris Agreement effective?” or “Does Ukraine need a carbon tax?”
- Discussion of international approaches to climate policy (EU vs. USA vs. China).
- Analysis of the prospects for implementing European standards into Ukrainian legislation.

Expected outcome: Development of argumentation skills, the ability to defend one’s position, and the formation of an independent vision of the problem.

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 includes lectures and practical classes (40% of the total course hours) and independent student work (60% of the total course hours). For each module, 12 academic hours are allocated for contact hours, while 18 hours are allocated for independent student work. Thus, the contact hours will consist of 1–3 lectures and practical classes, to which the remaining time will be devoted.

The main organizational form of learning is the lecture, which marks the beginning of the course study. During the first lecture, students are introduced to the instructors, the objectives and structure of the course; the connection between the theoretical content of the course and practical tasks is explained; a list of educational

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and scientific sources for studying the course is provided, and the conditions of current and final assessment are communicated.

The main requirements for lectures are: scientific rigor and informativeness; validity and the presence of a sufficient number of scientific justifications, facts, documents, vivid and convincing examples; activation of students' thinking through reflective questions; clear structure and logic in the gradual presentation of the material; methodological processing of educational material, explanation of new terms, highlighting of key ideas, provisions, and conclusions, repetition of conclusions in different interpretations, etc.

The final lecture provides a brief review of the studied material, as well as systematization of knowledge with mandatory clarification of the most difficult examination questions.

The educational process also includes practical classes. They provide students with the opportunity for a more in-depth study of the course and play an important role in helping master's students acquire skills in applying theoretical knowledge to solving practical tasks. Practical classes allow the instructor to develop and monitor the process of students' mastery of the course material. Practical classes may be implemented in the form of assignments, exercises, solving situational tasks, and developing teamwork skills during research and analysis of obtained results.

Independent work of master's students is an essential part of the educational process. The effectiveness of classroom work depends on the student's self-preparation. Effective independent work requires planning and monitoring by the instructor, as well as planning of its volume within the curriculum. Independent work is performed not only for mastering the course but also for developing skills of independent work in general—in educational, scientific, and professional activities—as well as for acquiring the ability to take responsibility, independently solve problems, find constructive solutions, and overcome crisis situations, etc.

Independent student work includes preparation for lectures, practical classes, and assessment activities, as well as completion of part of the practical assignments.

The role of the instructor during lectures is determined by the overall management of the educational process, selection of learning activities, and learning strategies. During practical classes, the instructor acts as an instructor or supervisor who determines the direction of practical assignments. Throughout the course, the instructor provides support to students through scheduled and unscheduled consultations.

The role of the student is to acquire knowledge, skills, and practical teamwork competencies while completing assignments provided by the instructor, which prepares the student for future professional activity.

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.

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For the assessment of master's students' knowledge, a modular form of control is used. The basis of the modular assessment system is the division of the course program into separate logically connected blocks – modules (in the form of tests of different types). The integrated assessment of students' acquisition of theoretical knowledge and skills in the course consists of the grades obtained for each of these modules (2 theoretical modules with a maximum score of 20 points each). At the same time, the integrated grade includes points for each module, which reflect the significance of the module in terms of students' acquisition of basic knowledge and skills, as well as rhythm – completion of assessment activities within the timeframe established by the course syllabus.

Tests are conducted in a distance format using the e-learning platform. Testing allows the instructor to assess the degree of students' mastery of the theoretical material. Theoretical tests consist of 20 questions. Correct answers to 50–74% of questions correspond to a satisfactory (minimum) level, 75–89% to a good level, and 90–100% to an excellent level of mastery.

Students may also independently monitor their level of theoretical understanding using self-assessment tests prepared for each section of the course and available on the e-learning platform. This type of assessment is aimed at deeper mastery of the theoretical part of the course and error correction.

Practical classes are conducted under the supervision of the instructor during contact hours, the number of which is defined in this syllabus (2 practical assignments with a maximum score of 30 points each). Assignments and source materials for completing practical tasks are provided on the e-learning platform. The completed practical assignment is uploaded by the student to the platform for evaluation and feedback from the instructor. Correctly completed practical assignments are assessed according to the achievement of learning outcomes and the quality of performance. Practical assignments are evaluated as follows: excellent level – the student completed the task independently (80% of the total score for the practical work), presented results in the form of a presentation (20% of the total score for the practical work), and answered the instructor's questions during the presentation; good level – the student completed the task independently without a presentation (80% of the total score for the practical work); satisfactory level – the student completed the task together with the instructor (60% of the total score for the practical work).

The integrated course grade is calculated as the arithmetic sum of points for the semester modules (grades for theoretical modules and practical work), i.e., the cumulative total of points accumulated during the semester, which represents the final grade for course completion.

Storyboard of Learning (Learning Storyboard)

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

Acquisition

Learning through acquisition is what master's students do when they listen to lectures or podcasts, read books or websites, and watch demonstrations or videos:

- reading books, articles (reading digital books, articles, multimedia, websites, documents, and resources);
- listening to instructors' presentations, lectures (listening to podcasts, webcasts);
- watching demonstrations, master classes (watching animations, videos, demonstrations, master classes);
- question and answer forum.

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).

Literature and Online Resources

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