

Work programme of the course:

Course title	CLIMATE ENTREPRENEURSHIP
Level of higher education (degree)	FIRST (BACHELOR)
Field of study	07 MANAGEMENT AND ADMINISTRATION
Major	073 MANAGEMENT
Program subject area	MANAGEMENT (ENGLISH)
Status of the discipline	ELECTIVE
Mode of studies	FULL-TIME, PART-TIME, E-LEARNING
Total number of hours/ ECTS credits	150 HOURS /5 ECTS CREDITS
Language of instruction	ENGLISH
Lecturer	NAUMOVA OLENA OLEKSANDRIVNA ASSOC. PROF., PH.D.
Lecturer's profile	https://www.krok.edu.ua/ua/pro-krok/spivrobitniki/naumova-olena-oleksandrivna
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Consultations	CONSULTATIONS IN MS TEAMS: FRIDAY, 11:00 A.M.-11.30 A.M. http://surl.li/mqkjxm %22%7d

1. Brief summary of the course

Climate change is a vital issue of our time. While climate change poses large potential risks to businesses worldwide, it also, perhaps uniquely, presents significant opportunities. Businesses can address climate change by promoting mitigation of climate change drivers or adaptation to climate change impacts. Two approaches for entrepreneurs to advance mitigation or adaptation are through developing and deploying new technologies or facilitating the local adoption of existing solutions. Entrepreneurs have opportunities to drive both mitigation and adaptation through these approaches in multiple stages of the value chain. Climate entrepreneurship is a rapidly emerging area with the potential to build societal resilience, create additional jobs in both rural and urban areas.

This course will provide students with the opportunity to contribute to climate change goals equipping them with:

- a set of frameworks and tools to identify and generate entrepreneurial opportunities that will have a positive impact on climate change
- the skills to plan and develop strategies, action plans that contribute to climate change mitigation;
- the ability to analyze theoretical concepts associated with systems innovation and entrepreneurship in relation to climate change;
- the communication skills to interact with stakeholders and explain their influence to drive position climate action;
- the knowledge and skills to evaluate ethical, social, commercial, and political factors in decision making to support climate entrepreneurship.

2. Learning outcomes

Upon successful completion of this course, students will be given critical and lateral thinking skills and an understanding of the societal and economic value that can be achieved by applying an innovative approach to the global challenge presented by climate change. Students will be able to use principles and practices associated with systems thinking in the context of climate change and how processes of systems innovation and creativity can support positive climate action. Students will identify opportunities for entrepreneurship that can positively impact climate change. They will gain an understanding of the value of entrepreneurship, innovation, and commercialization and its potential to positively impact climate change and sustainability. Students will understand the process involved in creating, leading, and scaling an entrepreneurial start-up venture and developing a sustainable green business.

General Competencies (GS):

GS 2. Ability to abstract thinking, analysis, synthesis.

GS 8. Skills in the use of information and communication technologies.

Professional Competencies (PC):

PC 6. Ability to act socially responsible and consciously.

PC 9. Ability to work in a team and establish interpersonal interaction in solving professional problems.

Program learning outcomes (PLO):

PLO 9. Demonstrate skills of interaction, leadership, teamwork.

3. Course scope

Type of class	Total number of hours/ ECTS credits - 150 HOURS /5 ECTS CREDITS		
Total number of hours / mode of studies	full-time	part-time	e-learning
lectures	28	14	14
seminars / practical / laboratory classes	22	7	7
Individual work	100	129	129

4. Prerequisites

Enterprise Economics and Finance, Entrepreneurship and Starting a Company

5. Hardware and software

PC / laptop, Internet access, camera, microphone

6. Course policies – students must adhere to a code of academic integrity:

<https://int.krok.edu.ua/images/download/code-of-academic-integrity-2025.pdf>

Academic integrity is the presentation of one's own work and the proper recognition of the contribution of others.

Any violation of this principle constitutes academic dishonesty and may result in poor evaluation and disciplinary action.

Forms of academic dishonesty include:

- Plagiarism - presenting all or part of someone else's work as one's own in an academic exercise, such as an exam, a computer program, or a written assignment.
- Fraud - Using or attempting to use unauthorized materials during an exam or assignment, such as using unauthorized texts or notes or improperly obtaining (or attempting to obtain) a copy of an examination or exam answers.
- Promoting academic dishonesty - helping others commit an act of dishonesty, such as replacing an exam or completing a task for someone else.
- Fabrication - modification or transfer, without permission, academic information, or records.

7. PROGRAMME OF THE COURSE

Module # 1

Topic 1. An introduction to climate entrepreneurship

The Impact of Natural Disasters on Entrepreneurs' Choice Between Economic Growth and Environmental Protection. Climate change mitigation and adaptation. Environmental motivations behind individuals' daily energy saving behaviour.

Topic 2. Climate entrepreneurship in developing economies by sector

Agriculture and food systems. Energy. Environment and natural resources. Other sectors.

Topic 3. Barriers, needs, and trends in climate entrepreneurship

Finance: Multilateral Climate Funds and Private Investment, Philanthropies' Program-Related Investments, Public Investment Capacity development: Incubators & Accelerators for Climate Entrepreneurs, Network Development for Climate Entrepreneurs.

Module #2**Topic 4. Entrepreneurship and the innovation process**

Innovative approaches to climate change adaptation. Innovation process. Commercialization issues

Topic 5. Marketing and the Green Customer

7P marketing concept. Green consumers. Green marketing policies

Topic 6. Programs for climate entrepreneurs

Climate technology program. Land accelerators. Sustaining competitive and responsible enterprises

Topic 7. Climate entrepreneurship development

Creating and scaling Start-up venture. Developing a sustainable green business

8. Course scheme

Topic	Number of hours									Control form
	Full-time			Part-time			E -learning			
	Lectures	Seminars /practical	Individual work	Lectures	Seminars /practical	Individual work	Lectures	Seminars /practical	Individual work	
Module # 1										
Topic 1. An introduction to climate entrepreneurship	4	2	10	2	1	14	2	1	14	IA, S, T, CS, P, C
Topic 2. Climate entrepreneurship in developing economies by sector	4	2	10	2	1	15	2	1	15	IA, S, T, CS, P, C
Topic 3. Barriers, needs, and trends in climate entrepreneurship	4	4	10	2	1	14	2	1	14	IA, S, T, CS, P, C
Module #2										
Topic 4. Entrepreneurship and the innovation process	4	4	10	2	1	14	2	1	14	IA, S, T, CS, P, C
Topic 5. Marketing and the Green Customer	4	4	10	2	1	14	2	1	14	IA, S, T, CS, P, C
Topic 6. Programs for climate entrepreneurs	4	2	10	2	1	14	2	1	14	IA, S, T, CS, P, C
Topic 7. Climate entrepreneurship development	4	4	10	2	1	14	2	1	14	IA, S, T, CS, P, C
Individual tasks			30			30			30	
Total hours	28	22	100	14	7	129	14	7	129	-
TOTAL	150			150			150			-

Control form

IA – individual assignments

S – survey

T – test, mid-term tests

CS – solving case-studies

P – oral presentation

C – credit

9. Individual tasks

Individual tasks are an integral part of the educational process, as they contribute to the development of analytical skills, creative thinking and independence of students.

Content of an individual educational and research task (educational project)

The individual task consists of three types of questions, task options posted on the moodle platform:

1. Open question:

- o Requires a detailed, detailed answer based on theoretical knowledge and analysis of additional information.
- o Tests your understanding of the topic, ability to formulate your own opinions and argue your position.

2. Calculation task:

- o Involves performing certain calculations using formulas or economic models.
- o Tests knowledge of economic methods and the ability to apply them in practice.

3. Situational task:

- o Presents a real economic problem or case that needs to be analyzed and a solution proposed.
- o Tests your ability to apply theoretical knowledge to solve practical problems and make informed decisions.

Requirements for completing the task:

- Clear structure: Answers should be logically structured, contain an introduction, main body and conclusions.
- Argumentation: Each statement must be supported by arguments and references to sources.
- Accuracy of calculations: When performing calculations, it is necessary to observe accuracy and use appropriate units of measurement.
- Originality: Answers must be your own and contain no plagiarism.
- Design: The work must be designed in accordance with the requirements specified on the moodle platform.

10. Teaching methods

1. In the process of studying the discipline " Climate Entrepreneurship", various types of educational activities, teaching methods and technologies are used.

Types of educational activities:

1. 1. Lectures: classes where the teacher presents theoretical and practical guidance material, analyzing the main concepts of Climate Entrepreneurship.
2. Seminars: interactive sessions in which students discuss topics, analyze case studies, and participate in group discussions that contribute to a deeper understanding of the material.
1. 3. Practical classes: focus on the application of Climate Entrepreneurship concepts.

Teaching methods and technologies:

1. Presentations and multimedia materials: the use of slides, videos and graphs, which facilitate the perception of information and make the educational process more visual.
2. Active learning methods: include group projects, discussions, role-playing games, and brainstorming sessions that promote active student involvement in the process.
3. Case method: analysis of real business situations, which allows students to practically apply theoretical knowledge, develop critical thinking and decision-making skills.

Use of information technologies: interactive platforms for learning

11. Control methods

Control measures are used to determine the success of training. Control measures include current and final control.

Current control is carried out during practical (seminar) classes and is aimed at checking the level of preparedness of the student to perform a specific task.

The final control is carried out to evaluate the learning results after the end of the study of the discipline (semester control) or modules separated according to the working curriculum.

During the study of this course, the following forms of current control are used: a mid-term tests.

When studying this course, the following form of semester control is used: a credit.

12. Distribution of points received by students

Evaluation of student learning results is carried out according to the University scale (0-100, taking into account optional tasks - 120 points) and the national scale.

General course evaluation system: Participation in the work during the semester / credit – 70%/30%

All tasks must be written independently, plagiarism is prohibited, no references or citations are required. The quality and originality of your arguments are evaluated. The task should be presented in Moodle

13.1. Scoring scheme for the course

Type of educational activity	Max score	Max total score
Modules #1 & #2		
Solving case-studies (3 x 5 points)	15	
Surveys / Test (2 x 5 points)	10	
Oral presentation (2 x 5 points)	10	
Individual work (1 x 20 points)	20	
Mid-term test (2 x 7,5 points)	15	
Total for modules #1 & #2	70	
Semester-module control work	30	
Total for the course		100

13.2. Conditions for awarding points

1. Solving case-studies (Maximum Score – 5 Points)

- Completeness of the Solution (2 Points): All stages of the problem-solving process are correctly presented, and all formulas and methods are justified.
- Accuracy of Answers (2 Points): All numerical data and calculation results must be accurate.
- Clarity of Presentation (1 Point): Logical structure of the work, clear presentation of solutions, and correct terminology.

2. Tests (Maximum Score – 5 Points)

- Number of Correct Answers (5 Points): Students receive 0,25 points for each correct answer (total number of tests per session is 20).

3. Survey (Maximum Score – 5 Points)

- Correctness of Answers (3 Points): Answers to questions must be accurate and correct.
- Coverage of the Topic (2 Points): Answers should demonstrate knowledge of all key aspects of the topic.

4. Oral presentation (Maximum Score – 5 Points)

- Substance (2 Points): Completeness and depth of topic coverage, inclusion of relevant data and examples.
- Visual Presentation (2 Points): Quality of slides, use of graphics, clarity, and aesthetics.
- Communication Skills (1 Point): Ability to convey information to the audience, respond to questions, and engage listeners.

5. Individual Work (Maximum Score – 20 Points)

- Depth of Research (6 Points): Quality of topic analysis, use of various sources of information and literature.
- Structure and Formatting (4 Points): Adherence to formatting requirements, logical structure of the work, correctness of citations.
- Originality and Creativity (4 Points): Presence of personal conclusions, recommendations, and interesting ideas.
- Responses to Questions (6 Points): Engagement in presenting work results, participation in discussions, and feedback.

6. Mid-term tests (Maximum Score – 7,5 Points)

- Number of Correct Answers (5 Points): Students receive 0,25 points for each correct answer (total number of tests per session is 30).

13.3. Final assessment criteria

University scale	Ukrainian Grade
90 and higher	excellent

70–89	good
50–69	satisfactory
1–49	unsatisfactory

14. Methodological provision

1. Attention students: all educational and methodological materials (lecture plans and videos, presentations/seminar assignments/case-studies, etc.) are submitted in Moodle Course: Climate Entrepreneurship (Olena Oleksandrivna Naumova) <https://dist.krok.edu.ua/course/view.php?id=775>.

15. Recommended literature

Basic

1. Tol, R. S. (2019). *Climate economics: economic analysis of climate, climate change and climate policy*. Edward Elgar Publishing.

Additional

2. Leal Filho, W. (Ed.). (2016). *Innovation in Climate Change Adaptation*. Springer International Publishing.
3. Boasson, E. L., & Huitema, D. (2017). Climate governance entrepreneurship: Emerging findings and a new research agenda. *Environment and Planning C: Politics and Space*, 35(8), 1343-1361.

16. Additional information on the discipline (educational component)

Certificates of completion for distance or online courses on the relevant topics may be credited provided that the requirements outlined in the corresponding regulation are met.

Work programme of the discipline:

Compiled by: Associate Professor of the Department of International Business, PhD in economics, Olena Oleksandrivna Naumova.

Approved: at the meeting of the Department of International Business (Protocol No. 2 dated September 17, 2024).