

**NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF
UKRAINE**

Department of General Ecology, Radiobiology and Safety of Life Activity

"APPROVED"

The Faculty of Plant Protection, Biotechnologies and Ecology

“21” May 2025

CURRICULUM OF ACADEMIC DISCIPLINE

Social Ecology

Field of knowledge 10 Natural sciences

Specialty 101 Ecology

Academic programme "Ecology"

Faculty (Education and Research Institute): Faculty of Plant Protection, Biotechnologies and Ecology

Author(s): docent Rakoid O.O., PhD on agrarian sciences

Kyiv – 2025

Description of the discipline Social Ecology

Social ecology, a discipline emerging at the intersection of the natural, technical, and human sciences, considers various scenarios for the development of the relationship between humans and the biosphere.

The key objective of social ecology is to improve the coexistence of human beings and the natural environment on a systematic basis. The aim of this course is to present a holistic view on social ecology, which studies the spatial and temporal characteristics of the interaction between society and nature.

Academic degree, specialty, academic programme		
Academic degree	Bachelor	
Specialty	101 Ecology	
Academic programme	"Ecology"	
Characteristics of the discipline		
Type	Compulsory	
Total number of hours	120	
Number of ECTS credits	4	
Number of modules	2	
Course project (work) (if any)	-	
Form of assessment	Exam	
Indicators of the discipline for full-time and part-time forms of university study		
	Form of obtaining higher education	
	Full-time	Part-time
Year of study	3	-
Semester	2	-
Lectures	30 hours	- hours.
Practical classes and seminars	30 hours	- hours
Laboratory classes	- hours	- hours
Self-study	60 hours	- hours
Number of hours per week for full-time students	4	

1. Aim, objectives, competences and expected learning outcomes of the discipline

Aim of mastering the discipline "Social Ecology" is the study of the leading theories and concepts of sustainable development of modern society, formulated in the works of national and foreign authors; acquire a deep knowledge and true competence in the problems of socio-natural character, the formation on this basis: an ecological worldview; responsible attitude to the environment; the desire for active action to protect the natural environment.

Objectives of social ecology are the laws of interaction between society and nature, mechanisms to reduce environmental pollution, maintaining ecological balance, as well as legal and socio-cultural conditions for sustainable development.

Acquisition of competences:

Integral competence (IC): Ability to solve complex specialized problems and solve practical problems in the field of ecology, environmental protection environment and balanced environmental management, which involves the application of basic theories and methods of environmental sciences, characterized by complexity and uncertainty of conditions.

General competencies (GC):

GC 07. Ability to act in a socially responsible and conscious manner.

GC 12. Ability to exercise one's rights and responsibilities as a member of society, to understand the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.

Special (professional) competences (SC):

SC19. Ability to assess the impact of technological processes on the environment and identify environmental risks associated with production activities.

SC20. Ability to use the basic principles and components of environmental management.

Expected Learning Outcomes (ELO):

ELO14. Be able to communicate the results of activities to a professional audience and the general public, make presentations and reports.

ELO15. Be able to explain the social, economic and political implications of environmental projects.

ELO17. Be aware of the responsibility for the effectiveness and consequences of implementing integrated environmental protection measures.

2. Programme and structure of the discipline

Modules and topics	Number of hours													
	full-time							part-time						
	weeks	total	including					total	including					
			l	p	lab	ind	s.st			l	p	lab	ind	s.s t
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Module 1. Theoretical and methodological aspects of social ecology														
Topic 1. Social ecology: subject, methods, principles and laws	1-2	11	4	4			5							
Topic 2. Socio-ecological interaction and its subjects	3	14	2	2			10							
Topic 3. The history of the relationship between human and nature	4-5	11	4	4			5							
Topic 4. Causes and signs of the modern crisis of the Nature-Society system	6-7	18	4	4			10							
Total for module 1	58		14	14			30							
Module 2. Socio-natural progress and the eco-society														
Topic 1. Human behaviour in the natural and social environment	8-9	18	4	4			10							
Topic 2. Human health as a comprehensive indicator of the state of human society	10-11	13	4	4			5							
Topic 3. Socio- demographic aspects of social ecology	12-13	13	4	4			5							
Topic 4. Ways to harmonize the relationship between human and nature	14-15	18	4	4			10							
Total for module 2	62		16	16			30							
Total hours	120		30	30			60							

Course project (work)		-	-	-	-	-	-	-	-	-	-
(if included in the curriculum)											
Total hours	120	30	30			60					

3. Topics of lections

№	Topic title	Hours
1	Social ecology: subject, methods, principles and laws	4
2	Socio-ecological interaction and its subjects	2
3	The history of the relationship between human and nature	4
4	Causes and signs of the modern crisis of the Nature-Society system	4
5	Human behaviour in the natural and social environment	4
6	Human health as a comprehensive indicator of the state of human society	4
7	Socio-demographic aspects of social ecology	4
8	Ways to harmonize the relationship between human and nature	4

4. Topics of practical classes

№	Topic title	Hours
1	Sociological approach in the study of ecology. Social ecology laws	4
2	The concept of the human environment and its main elements. Ecology of the living environment	2
3	The relationship between society and nature in the history of civilization	4
4	Environmental crisis: its meaning, development phases and signs. Socio-ecological problem and its contradictions. Development models and possible scenarios for overcoming the global environmental crisis	4
5	The concept of behaviour. Biochemical, biophysical and informational levels of behaviour regulation. Characterization of environmental needs	4
6	The impact of socio-environmental factors on human health. The concept of "healthy lifestyle"	4
7	Ecology and demography. Socio-demographic problems of Ukraine	4
8	Ecological society as a type of social structure. The concept of sustainable development of nature and society	4

5. Topics for self-study

№	Topic title	Hours
1	The modern concept of social ecology, the structure of social ecology.	5
2	Principles of interaction between society and the natural environment.	10
3	Theory of basic human values	5
4	Relationships between human activity and the environment	10
5	The ways in which humans use natural resources and examples of problems caused by over-exploitation	10
6	Public health: historical context and current agenda	5
7	Ecological and economic problems of urban areas	5
8	Global Sustainable Development Goals: problems of implementation in war situations in Ukraine	10

6. Tools for assessing expected learning outcomes:

- oral or written questioning;
- interview;
- testing;
- defence of laboratory/practical, calculation/graphic works, projects;
- peer assessment, self-assessment.

7. Teaching methods:

- the method of problem-based learning;
- method of practice-oriented learning;
- case method;
- method of learning through research;
- method of educational discussions and debates;
- method of teamwork, brainstorming.

8. Assessment of learning outcomes:

The assessment of students' knowledge and skills is conducted by means of a 100-point scale and is converted into national grades of the current Exam and Credit Regulations at NULES of Ukraine.

8.1. Distribution of points received by students

Type of learning activity	Learning outcomes	Assessment
Module 1. Theoretical and methodological aspects of social ecology		
Lecture 1 Social ecology: subject, methods, principles and laws	To know structure of tasks and methods of research in the field of social ecology; To recognize modern areas of research in the field of social ecology and international cooperation; To understand the basic laws of social ecology	2
Practical class 1. Sociological approach in the study of ecology. Social ecology laws		10
Self-study 1. The modern concept of social ecology, the structure of social ecology		6
Lecture 2 Socio-ecological interaction and its subjects	To extend knowledge about the basic elements of the environment and their influence on human living conditions	2
Practical class 2. The concept of the human environment and its main elements. Ecology of the living environment		10
Self-study 2. Principles of interaction between society and the natural environment		6
Lecture 3 The history of the relationship between human and nature	To be able to use the system of concepts and indicators of social and ecological sciences to solve applied problems, using various sources of information; To know the principles of the formation of environmental consciousness, elements of environmental ethics and environmental culture of society, sociological aspects of environmental protection	2
Practical class 3. The relationship between society and nature in the history of civilization		10
Self-study 3. Theory of basic human values		5
Lecture 4 Causes and signs of the modern crisis of the Nature-Society system	To recognize the scientific foundations and understand the relationship of natural and socio-economic factors in the development of environmental crises; To be able to suggest solutions to socio-ecological problems and predict the negative consequences of economic activity	2
Practical class 4. Environmental crisis: its meaning, development phases and signs. Socio-ecological problem and its contradictions. Development models and possible scenarios for overcoming the global environmental crisis		10

Self-study 4. Relationships between human activity and the environment		5
Module test 1.		30
Total for Module 1		100
Module 2. Socio-natural progress and the eco-society		
Lecture 5 Human behaviour in the natural and social environment	To designate the degree of relevance for basic human needs; To be master of skills in analyzing the natural and social conditions of the environment and activities of the population at the level of the individual, social groups, state, and humanity as a whole	2
Practical class 5. The concept of behaviour. Biochemical, biophysical and informational levels of behaviour regulation. Characterization of environmental needs		10
Self-study 5. The ways in which humans use natural resources and examples of problems caused by over-exploitation		6
Lecture 6 Human health as a comprehensive indicator of the state of human society	To predict possible changes in the characteristics of human health under the influence of dynamic changes in the external environment; To be master of skills in assessing the quality of life of the population in accordance with the natural conditions of living	2
Practical class 6. The impact of socio-environmental factors on human health. The concept of "healthy lifestyle"		10
Self-study 6. Public health: historical context and current agenda		5
Lecture 7 Socio-demographic aspects of social ecology	To determine the indicators that characterize the human population and the state of its environment; To carry out a statistical evaluation of dangerous and harmful factors for human life	2
Practical class 7. Ecology and demography. Socio-demographic problems of Ukraine		10
Self-study 7. Ecological and economic problems of urban areas		5
Lecture 8 Ways to harmonize the relationship between human and nature	To know the principles of the formation of environmental consciousness, elements of environmental ethics and environmental culture of society, sociological aspects of environmental protection, public and environmental movements	2
Practical class 8. Ecological society as a type of social structure. The concept of sustainable development of nature and society		10
Self-study 8. Global Sustainable Development Goals: problems of implementation in war situations in Ukraine		6
Module test 2.		
Total for Module 2		100
Educational work	$(M1 + M2)/2 \cdot 0,7 \leq 70$	
Examination	30	
Total for the course	$(\text{Academic work} + \text{examination}) \leq 100$	
Course project (work) (if included in the curriculum)		100

8.2. Scale for assessing students 'knowledge and skills

Student's rating, points	National grading of exams and credits
90-100	excellent
74-89	good
60-73	satisfactorily
0-59	unsatisfactorily

8.3. Assessment policy

Deadlines and exam retaking policy:	Works that are submitted late without valid reasons will be assessed with a lower grade. Module tests may be retaken with the permission of the lecturer if there are valid reasons (e.g., a sick leave).
Academic integrity policy:	Cheating during tests and exams is prohibited (including using mobile devices). Term papers and essays must have correct references to the literature used
Attendance policy:	Attendance is compulsory. For good reasons (e.g., illness, international internship), training can take place individually (online by the faculty dean's consent)

9. Teaching and learning aids

1. Електронний курс дисципліни "Social ecology":
<https://elearn.nubip.edu.ua/course/view.php?id=4922>
2. Rakoid O.O., Klepko A.V., Bondar V.I. Social Ecology. Textbook for students of Bachelor's Degree in the specialty 101 Ecology. Kyiv: NUBIP, 2023. 209 p.
3. Rakoid O.O., Klepko A.V. Social Ecology. Educational and methodological manual for students of Bachelor's Degree in the specialty 101 Ecology. Kyiv: NUBIP, 2023. 89 p.
4. Rakoid O.O., Solomenko L.I. Human Ecology. Study guide. Kyiv: NUBIP, 2020. 191 p.
5. Understanding Human Ecology. Knowledge, Ethics and Politics by Geetha Devi T. V., 2019. 240 pp.
6. Кунах О.М., Жуков О.В. Соціальна екологія: Навчально-методичний посібник. Дніпро: типографія «АРБУЗ», 2021. 61 с.
7. Ракоїд О.О., Клепко А.В., Бондарь В.І. Соціальна екологія. Навчальний посібник для студентів ОС Бакалавр за спеціальністю 101 Екологія. К.: НУБіП, 2024. 185 с.
8. Ракоїд О.О., Клепко А.В., Бондарь В.І. Соціальна екологія. Навчально-методичний посібник для студентів ОС Бакалавр за спеціальністю 101 Екологія. К.: НУБіП, 2024. 123 с.

10. Recommended sources of information

1. ЕкоСистема, національна онлайн-платформа, яка містить актуальну інформацію про стан довкілля: <https://eco.gov.ua/>
2. Information and analytical data base "Environmental passport of the regions of Ukraine": <http://ukrecopass.org.ua/>

3. Державна служба з питань безпечності харчових продуктів та захисту споживачів: <https://dpss.gov.ua/bezpechnist-harchovih-produktiv-ta-veterinarna-medicina>
4. Sustainable Development knowledge platform: <http://sustainabledevelopment.un.org/>
5. Self-Nutrition Data. <https://nutritiondata.self.com/>
6. Biorhythm Calculator. <https://keisan.casio.com/exec/system/1340246447>
7. World data center for Geoinformatics and Sustainable Development: <http://wdc.org.ua/en/services/ukraine-sd>
8. ЕкоЗагроза (офіційний вебресурс і мобільний додаток Міндовкілля): <https://ecozagroza.gov.ua/>
9. Національна платформа звітування за ЦСР (відкрита платформа ЦСР). URL: https://ukrstat.gov.ua/csr_prezent/2020/ukr/st_rozv/menu.htm