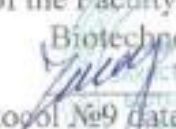


**NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF  
UKRAINE**

Department of General Ecology, Radiobiology and Safety of Life Activity


**"CONFIRMED"**

Dean of the Faculty of Plant Protection,  
Biotechnologies and Ecology  
  
Yulia KOLOMIETS  
Protocol №9 dated "18" May 2023 p.

**"APPROVED"**

at the meeting of the department of General Ecology  
radiobiology and Safety of Life Activity  
Protocol №9 dated "19" 04.2023 p.


Head of Department

  
Alla KLEPKO

**"REVIEWED"**

Program Coordinator "Ecology"

Program Coordinator

  
Volodymyr BOGOLYUBOV

**PROGRAM OF THE COURSE**

Social ecology

Specialization 101 Ecology

Educational program "Ecology"

Faculty (Institute) Faculty of Plant Protection, Biotechnologies and Ecology

Developers: docent Rakoid O.O., PhD on agrarian sciences

(position, academic degree, academic title)

Kyiv – 2023 p.

## 1. Description of the course

### Social ecology

(title)

Field of knowledge, specialization, educational program, educational degree		
Educational degree	<i>Bachelor's</i>	
Specialization	<i>101 Ecology</i>	
Educational program	<i>"Ecology"</i>	
Characteristics of the course		
Type	Compulsory	
Total number of hours	120	
Number of ECTS credits	4	
Number of content modules	2	
Course project (work) (if applicable)		
Form of assessment	<i>Exam</i>	
Indicators of the course for full-time and part-time forms of study		
	Full-time form of study	Part-time form of study
Course (year of study)	3	
Semester	6	
Lecture classes	30 hr.	hr.
Practical, seminar classes	30 hr.	hr.
Laboratory classes	hr.	hr.
Self-study	60 hr.	hr.
Individual assignments	hr.	hr.
Number of weekly classroom hours for the full-time form of study	4 hr.	

## 2. Purpose, objectives, and competencies of the course

*Purpose* 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 competencies:*

Integrated competency (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):**

GC7. Ability to act in a socially responsible and conscientious manner.

GC12. Ability to realize their rights and duties 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, the rights and freedoms of man and citizen of Ukraine.

**Professional (special) competencies (PC):**

PC5. Ability to assess the impact of technogenesis processes on the environment and identify environmental risks associated with production activities.

PC6. Ability to utilize the basic principles and components of environmental management.

**Program learning outcomes (PLO):**

PLO14. Be able to communicate the results of activities to professional audiences and the general public, make presentations and reports.

PLO15. Be able to explain the social, economic and political implications of implementing environmental projects.

PLO17. Recognize responsibility for the effectiveness and consequences of implementing integrated environmental measures.

**3. Program and structure of the course for:**

– complete full-time (part-time) form of study;

Names of content modules and topics	Number of hours													
	Full-time form							Part-time form						
	week s	tot al	including					total	including					
			1	p	lab	in d	sel f		1	p	lab	in d	se lf	
2	3	4	5	6	7	8	9	10	11	12	13	14		
<b>Content Module 1. Theoretical and methodological aspects of social ecology</b>														
Topic 1. Social ecology: subject, methods, principles and laws	1-2	11	4	4			5							
Topic 2. Socio-ecological interaction and its subjects	3-4	14	2	2			10							
Topic 3. The history of the relationship between human and nature	5-6	11	4	4			5							
Topic 4. Causes and signs of the modern crisis of the Nature-Society system	7-8	18	4	4			10							
Total for content module 1	58		14	14			30							
<b>Content Module 2. Socio-natural progress and the eco-society</b>														

Topic 1. Human behaviour in the natural and social environment	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 content module 2	62		16	16			30						
Total hours	120		30	30			60						
Course project (work) on _____ (if included in the curriculum)			-	-	-		-		-	-	-		-
Total hours	120		30	30			60						

#### 4. Seminar topics

No	Topic title	Number of hours
1		
2		
...		

#### 5. Practical class topics

No	Topic title	Number of 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

## 6. Laboratory class topics

№	Topic title	Number of hours
1		
2		
...		

## 7. Independent work topics

№	Topic title	Number of 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

## 8. Samples of control questions, tests for assessing the level of knowledge acquisition by students.

### Control questions

1. The human phenomenon and the main interpretations of descent of man.
2. Socio-ecological monitoring.
3. Biological and social of human needs.
4. Anthro-ecological criteria of environmental quality.
5. Problems of epidemiological information.
6. Global ecological disasters, catastrophes, epidemics.
7. The influence of environmental factors on the human body.
8. Classification of diseases and morbid conditions in terms of degree and type of the dependence on environmental factors.
9. The concept of natural prerequisites for diseases.
10. Human gene pool and aggressive environmental factors
11. Natural population changes. Ethnicities and ethnic processes

12. Geochemical natural environmental factors.
13. Social factors of human adaptation.
14. Natural-endemic diseases.
15. Risk factors for the formation of human health.
16. Specifics of the current demographic situation in Ukraine.
17. The main groups of methods in the methodological apparatus of social ecology.
18. Greening consumption.
19. Problems of life quality and environmental safety.
20. General principles of protection of the living environment.
21. Strategies for long-term human adaptations to the environment.
22. Human as a natural and social being.
23. Ecological problems of marriage and family.
24. Stress and other psychological problems.
25. History of global human epidemics. Wars and epidemics.
26. Human Uniqueness.
27. Cultural and geographical aspects of recreation.
28. Public health organization in Ukraine.
29. Threats to the balance in nature by human activities.
30. The concept of sustainable development as an opportunity to harmonise the Nature-Society system.

#### Sets of tests

<b>НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ БІОРЕСУРСІВ І ПРИРОДОКОРИСТУВАННЯ УКРАЇНИ</b>			
<b>ОС «Бакалавр» напряму підготовки</b>	<b>Кафедра загальної екології, радіобіології та безпеки життєдіяльності</b>	<b>ЕКЗАМЕНАЦІЙНИЙ БІЛЕТ № 1</b> з дисципліни <b>Social ecology</b>	<b>Затверджую</b> Зав. кафедри  (підпис) А.В. Клепко _____ 2023 р.
<i>101 Екологія</i>			
<i>2023-2024 навч. рік</i>			
<b>Екзаменаційні запитання</b>			
1. Name the ecological and economic problems of urban areas.			
2. Social ecology as an integral science. Relations with other disciplines from human and natural sciences.			
<b>Тестові завдання різних типів</b>			
1. Provide the correct wording of one of the axioms of social ecology			
2. Is population health an indicator that does not characterize the community of people?			
Yes		No	
3. Among all the problems of civilization, researchers distinguish three interrelated groups:			
1 political and socio-economic	A crisis of culture and morals, lack of democracy, urbanization, declining health		
2 natural - economic	B normal functioning of the world economy, overcoming the backwardness of		
3 social	underdeveloped countries, etc.		
	C raw materials, energy and food security		
4. The term "social ecology" was proposed by:			
1. American scientist Harlan Burroughs;			
2. American researchers Robert Park and Ernest Burgess;			
3. Russian ecologist Vlaiil Kaznachejev;			
4. Ukrainian naturalist Volodymyr Vernadsky.			
5. Element that is not part of the anthropoecosystem:			
1 demographic behavior;			
2 environmental pollution;			
3 political situation;			

4. migratory pressure.	
6. <i>Sciences that study man and his place in the world</i>	
1 human ecology 2 social ecology 3 human synecology 4 global human ecology	A when considering the social series, personality, family B studies the relationship "nature-human society" on a global scale C when it comes to an individual, a reproductive group D association of scientific fields that study the relationship of the individual, family and other social groups with nature and the social environment
7. <i>According to molecular genetic research, the ancestral home of man is China</i>	
Yes	No
8. <i>Average life expectancy is:</i>	
1. the number of future years of life of a group of people of a certain age;	
2. the period during which the community of people effectively performs its functions;	
3. the number of years that a certain population of people should live on average;	
4. the number of years that a certain generation should live on average.	
9. <i>The average gene size in humans:</i>	
1. 0.5–1 thousand nucleotide pairs;	
2. 1–3 thousand nucleotide pairs;	
3. 5-10 thousand nucleotide pairs;	
4. 100 thousand nucleotide pairs.	
10. <i>What is the living environment?</i>	

## 9. Teaching methods.

When studying the discipline, the following methods of teaching are used:

Depending on the source of knowledge: verbal (explanation, conversation, discussion, dialogue); visual (demonstration, illustration); practical (problem solving, business games).

By the type of cognitive activity: explanatory-visual problematic presentation, partly search and research methods.

By place in learning activities:

- methods of organization and implementation of learning activities, combining verbal, visual and practical methods; reproductive and problem-solving; methods of learning work under the guidance of a teacher and methods of independent work of higher education applicants;

- methods of control and self-control of learning activities: methods of oral and written control; individual and frontal, thematic and systematic control.

In the process of teaching the academic discipline to intensify the educational and cognitive activity of applicants for higher education the use of such educational technologies is provided:

- work in small groups allows to structure practical seminars in form and content, creates opportunities for participation of each applicant for higher education in the work on the topic of the class, provides the formation of personal qualities and experience of social communication;

- seminars-discussions involve the exchange of opinions and views of the participants about the topic, as well as develop thinking, help to form views and beliefs, the ability to formulate thoughts and express them, learn to evaluate the proposals of others, and critically think about their own views;

- brainstorming as a method of solving urgent problems, the essence of which is to express as many ideas as possible in a limited amount of time, to discuss and carry out their selection;

- case method - a method of case studies, which allows to bring the learning process closer to the real practical activity of specialists and involves the consideration of production, management and other situations, complex conflict cases, problem situations, incidents in the study of educational material;

- presentations - speeches to an audience, which are used to present certain achievements, group results, report on the performance of individual tasks, instruction, and demonstrations.

### **10. Forms of assessment**

In accordance with the Regulations on the examinations and credits at the National University of Life and Environmental Sciences of Ukraine, approved by the Academic Council of NUBiP Ukraine on April 26, 2023, Protocol № 10, the types of knowledge control of higher education are the current control, intermediate and final attestation.

Current control of the discipline is carried out during the practical purposes, and aims to test the level of preparedness of applicants for higher education to perform specific work.

Intermediate attestation is held after the study of program material and should determine the level of knowledge of applicants for higher education in the program material obtained in all types of classes and independent work.

The form of the intermediate attestation is testing.

The mastering of the program material by a higher education applicant is considered successful if his rating score is at least 60 points on a 100-point scale.

Semester certification is held in the form of semester exam.

Applicants for higher education are required to take exams and credits in accordance with the requirements of the working curriculum in the time provided by the schedule of the educational process. The content of exam is determined by the working training program of the discipline.

### **Distribution of grades received by students.**

Evaluation of student knowledge is carried out on a 100-point scale and is converted to national grades according to Table 1 "Regulations and Examinations and Credits at NULES of Ukraine" (order of implementation dated 24.04.2023, protocol №10).

<b>Student rating, points</b>	<b>National grade based on exam results</b>	
	<b>Exams</b>	<b>Credits</b>
<b>90-100</b>	<b>Excellent</b>	<b>Passed</b>
<b>74-89</b>	<b>Good</b>	
<b>60-73</b>	<b>Satisfactory</b>	
<b>0-59</b>	<b>Unsatisfactory</b>	<b>Not passed</b>

In order to determine the rating of a student (listener) in the discipline  $R_{dis}$  (up to 100 points), the rating from the exam  $R_{ex}$  (up to 30 points) is added to the rating of a student's academic work  $R_{aw}$  (up to 70 points):  $R_{dis} = R_{aw} + R_{ex}$ .



## **11. Educational and methodological support.**

1. 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.
2. 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.
3. Rakoid O.O., Solomenko L.I. Human Ecology. Study guide. Kyiv: NUBIP, 2020. 191 p.
4. Електронний курс дисципліни “Social ecology”: <https://elearn.nubip.edu.ua/course/view.php?id=4922>
5. Ukraine: Public Health Situation Analysis. Updated: May 2023. 95 p.
6. Understanding Human Ecology. Knowledge, Ethics and Politics by Geetha Devi T. V., 2019. 240 pp.
7. Короткий курс соціоекології. Методичні рекомендації до вивчення дисципліни «Соціоекологія та екологічна етика» / Автори: Хом'як І. В., Демчук Н. С., Мостіпака Т. П. Житомир: вид-во ЖДУ ім. І. Франка, 2019. 95 с.
8. Тихомірова, Ф. А. Соціальна екологія міста як проблемне поле соціальної філософії. Актуальні проблеми філософії та соціології. 2019. (Вип. 25).
9. Ситнікова І.О., Филипчук Т.В. Екологія людини: теорія і практика: навч. посібник. Чернівці: Чернівець. нац. ун-т ім. Ю. Федьковича, 2022. 248 с.
10. Кунах О.М., Жуков О.В. Соціальна екологія: Навчально-методичний посібник, Дніпро: типографія «АРБУЗ», 2021. 61 с.
11. Інструктивно-методичні матеріали до практичних занять з освітньої компоненти «Екологія людини» / Укладачі: Онищук І.П., Коцюба І.Ю. Житомир: Вид-во ЖДУ ім. І. Франка, 2022. 33 с.
12. Transforming our world: the 2030 Agenda for Sustainable Development. URL: <https://sustainabledevelopment.un.org/post2015/transformingourworld>
13. Національна доповідь “Цілі сталого розвитку: Україна”. Міністерство економічного розвитку і торгівлі України, 2017. 176 с.
14. Якість життя населення України та перші наслідки війни / Черенько Л.М., Полякова С.В., Шишкін В.С., Реут А.Г., Крикун О.І., Когатько Ю.Л., Заяць В.С., Клименко Ю.А.; Нац. акад. наук. Укр., Ін-т демогр.та соц. дослідж. ім.М.В. Птухи. Електронне видання. Київ, 2023. 191 с.

## **12. 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\\_present/2020/ukr/st\\_rozv/menu.htm](https://ukrstat.gov.ua/csr_present/2020/ukr/st_rozv/menu.htm)