

Syllabus
selective educational component

Recreation and soil science

Title:	Recreation and soil science
Level of preparation:	Initial (short) cycle
Course webpage in Moodle:	<i>https://dl.khadi.kharkov.ua/course/view.php?id=788</i>
The scope of the educational component	3 credits (90 hours)
Final control form	Test
Consultations:	on schedule
Name of the Department:	Department of Ecology
Teaching language:	English
Course leader:	Walter Halyna Andriivna, PhD, associate professor
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Brief content of the educational component:

The purpose of the discipline: the study of soils as a natural body and an integral part of the geosphere, their current state and their use for recreation

Subject Recreational foundations of social soil science

The main tasks of studying the educational component

- knowledge of the classification and general regularities of the geography of soils and the recreational direction of their reclamation

Prerequisites for studying the educational component: "Fundamentals of recreology".

Competencies:

- the ability to collect, register and analyze data using appropriate methods and technological means in field and laboratory conditions
-. the ability to monitor natural processes.
- the ability to apply knowledge of the features of placement and use of recreational resources by regions and territories of the world
- basic ideas about the geography of recreation and tourism, geographical foundations of rational recreational nature use

Learning outcomes according to the educational program:

- apply models, methods and data of physics, chemistry, biology, ecology, mathematics, information technologies, etc. when studying natural processes of formation and development of geospheres.
- to be able to use modern information resources on issues of ecology of nature use and environmental protection.
- to be able to assess the potential impact of man-made objects and economic activities on the environment.
- to be able to use the results of recreational research in practical activities

Thematic plan

№ of theme	Name of topics (LC, PW, IW)	Quantity of hours	
		full-time	correspondence
1	LC The place, role and significance of soil science in modern science and in life	2	
	LC Geography of recreation and tourism	2	
	PW Soil science as a science, its main provisions. Methodology and methods of soil research Soil and the place of soil in nature and human activity.	2	
	IW Definition of soil science. Stages of development of soil science	5	
2	LC Soil classification Basic principles of modern soil classification. The main areas of soil classification.	4	
	PW Basic principles of modern classification of soils for recreational use	2	
	IW System of taxonomic units of soil classification	5	
3	LC. General regularities of soil geography. Basic regularities of the geographical distribution of soils	4	
	PW Law of horizontal zonation, law of vertical zonation, law of facies, law of similar topographic series	2	
	IW Soil and geographic zoning	5	
4	LC Lands of Ukraine. Characteristics of the main types of soils of Ukraine.	4	
	PW Soil-geographic zoning and the general scheme of the soil cover of Ukraine	2	
	IW Soil-bioclimatic zones, regions, zones, provinces, districts, district	5	
5	LC. Soils of the Ukrainian Polissia.	4	
	PW Soils of forest-steppe, steppe, dry steppes	2	
	IW Soil resources: current state and their use in Ukraine	2	
6	LC Sustainable management of soil resources and social development of society	4	
	PW. Information provision of soil use in social development	2	
	IW. Legal foundations of social soil science	5	
7	LC Principles of rational use and tasks of soil protection	4	
	PW Recreational phytomelioration	2	
	IW Legal basis of soil protection in Ukraine	6	
8	LC Soil pollution and chemical poisoning - Soil pathology and human health - Soil monitoring	4	
	PW Protection of soils from pollution. Soil reclamation	2	
	IW Agricultural, forestry and recreational areas of reclamation	6	
In total	LC	32	
	PW	16	
	IW	42	

Teaching methods:

- 1) verbal: traditional: lectures, explanations, etc.;
- 2) visual: the method of illustrations, the method of demonstrations;
- 3) practical: practical classes;

Evaluation system and requirements:

Current performance

1 The current success of applicants for the performance of educational types of work in training sessions and for the performance of independent work tasks is evaluated using a four-point rating scale with subsequent transfer to a 100-point scale. During the evaluation of the current academic performance, all types of work provided by the educational program are taken into account.

1.1 Lecture classes are evaluated by determining the quality of performance of specified tasks.

2 Evaluation of the current academic performance of students of higher education is carried out after each lecture on a four-point scale ("5", "4", "3", "2") and is entered in the journal of academic performance.

– "excellent": the winner mastered the theoretical material flawlessly, demonstrates deep knowledge of the relevant topic or academic discipline, the main provisions;

- "good": the applicant has mastered the theoretical material well, has the main aspects from primary sources and recommended literature, presents it in a reasoned manner; has practical skills, expresses his thoughts on certain problems, but certain inaccuracies and errors are assumed in the logic of the presentation of theoretical content or in the analysis of practical ones;

- "satisfactory": the applicant has basically mastered the theoretical knowledge of the educational topic or discipline, orients himself in primary sources and recommended literature, but answers unconvincingly, confuses concepts, answers additional questions uncertainly, does not have stable knowledge; when answering questions of a practical nature, reveals inaccuracy in knowledge, does not know how to evaluate facts and phenomena, connect them with the future profession;

- "unsatisfactory": the applicant has not mastered the educational material of the topic (discipline), does not know scientific facts, definitions, hardly orients himself in primary sources and recommended literature, lacks scientific thinking, practical skills are not formed.

3 The final score for the current activity is recognized as the arithmetic mean sum of points for each lesson, for individual work, current control works according to the formula:

$$K_{\text{current}} = K_1 + K_2 + \dots + K_n / n$$

K_{current} – final assessment of success based on the results of current control;

K_1, K_2, \dots, K_n – assessment of the success of the current control measure;

n – number of ongoing control measures.

Estimates are converted into points according to the calculation scale (table 1).

Table 1 – Recalculation of the average grade for the current activity into a multi-point scale

4- score scale	100- score scale	4- score scale	100- score scale	4- score scale	100- score scale	4- score scale	100- score scale
5	100	4,45	89	3,90	78	3,35	67
4,95	99	4,4	88	3,85	77	3,3	66
4,9	98	4,35	87	3,80	76	3,25	65
4,85	97	4,3	86	3,75	75	3,2	64
4,8	96	4,25	85	3,7	74	3,15	63
4,75	95	4,20	84	3,65	73	3,1	62
4,7	94	4,15	83	3,60	72	3,05	61
4,65	93	4,10	82	3,55	71	3	60

4,6	92	4,05	81	3,5	70	from 1,78 to 2,99	from 35 to 59
reassembly							
4,55	91	4,00	80	3,45	69	from 0 to 1,77	from 0 to 34
4,5	90	3,95	79	3,4	68	reassembly	

Final assessment

1 A student of higher education receives a credit in the last lesson in the discipline based on the results of the current assessment. The average score for the current activity is converted into points on a 100-point scale, according to the conversion table (table 1).

Applicants for higher education who have a current grade point average in the discipline lower than "3" (60 points) can increase their current grade by taking tests in the discipline in the last session.

Assessment of the knowledge of applicants through testing is carried out according to the following scale:

- "Excellent": at least 90% of correct answers;
- "Very good": from 82% to 89% of correct answers;
- "Good": from 74% to 81% of correct answers;
- "Satisfactory": from 67% to 73% of correct answers;
- "Satisfactory enough": from 60% to 66% of correct answers;
- "Unsatisfactory": less than 60% of correct answers.

2 The condition for obtaining credit is:

- making up for all missed classes;
- the average current grade in the discipline is not lower than "3" (60 points).

3 The learning result is evaluated (select is required):

- on a two-point scale (passed/failed) according to table 2;

Table 2 – Scale for transferring points to the national evaluation system

On a 100-point scale	On a national scale
from 60 points to 100 points	counted
less than 60 points	not counted

Course policy:

- the course involves working in a team, the environment in the classroom is friendly, creative, open to constructive criticism;
- mastering the discipline involves mandatory attendance of lectures, as well as independent work;
- independent work involves the study of individual topics of the academic discipline, which are presented in accordance with the program for independent study, or were considered briefly;
- all tasks provided by the program must be completed within the set time;
- if the student of higher education is absent from classes for a good reason, he presents the completed tasks during independent preparation and consultation of the teacher;
- while studying the course, students of higher education must adhere to the rules of academic integrity set forth in the following documents:

"Rules of academic integrity of participants in the educational process of the Khnadu" (https://www.khadi.kharkov.ua/fileadmin/P_Standart/pologeniya/stvnz_67_01_dobroch_1.pdf),

"Academic integrity. Checking the text of academic, scientific and qualification papers for plagiarism" (https://www.khadi.kharkov.ua/fileadmin/P_Standart/pologeniya/stvnz_85_1_01.pdf),

"Moral and ethical code of participants in the educational process of the Khnadu (https://www.khadi.kharkov.ua/fileadmin/P_Standart/pologeniya/stvnz_67_01_MEK_1.pdf).

- in case of detection of plagiarism, the applicant receives 0 points for the task and must repeat the tasks provided for in the syllabus;
- writing off during tests and exams is prohibited (including using mobile devices). Mobile devices are allowed to be used only during online testing.

Recommended Books:

1. Soil science. Part 2. Genesis, classification and agricultural use of soils. Tutorial. – Uzhhorod: UzhNU. - 2014. - 284 p.
Shkvarchuk M.M., Delemenchuk M. 1. Soil science. - K.: Higher School, 2016.-319p.
2. Polupai M.I., Solovei V.B., Velychko V.A. Classification of soils of Ukraine. - K., 2015. - 300 p.
3. Topolny V.P., Petrychenko V.F., Yarov V.M. Soil science with the basics of geology. – Kamianets-Podilskyi: ABETKA, 2020. – 116 p.

Additional sources:

1. Matviets O.H. Land resources of the Transcarpathian region and their rational use in modern socio-economic conditions // Economy of Transcarpathia today and tomorrow: ways out of the crisis. Materials of scientific and practical conferences. – Uzhhorod: UzhDU, 1997. – P.169-172.
2. Dolupan M. I., Solovei V. B., Velychko V. A. Soil classification of Ukraine // Agrochemistry and soil science. - Kharkiv, 2002. - Special issue for the 6th Congress of UTTA. - P. 129-138.
3. Nikolaychuk V. 1., Bilyk P. P., Matviets O. G., Kishko K. M. Soil Science: Study Guide. — Uzhhorod: UzhNU, 2014. — Part II: Genesis, classification and agricultural use of soils. -284 p.

Developer(s)

the syllabus of the academic discipline _____ Walter H.A

Head of Department

_____ Vnukova N.V.