Документ подписан простой электронной подписью

Информация о владельце:

ФИО: Ястребов Олег Александрович PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA NAMED AFTER PATRICE LUMUMBA

Дата подписания: 23.05.2023 17:57:32

Уникальный программный ключ:

ca953a0120d891083f939673078ef1a989dae18anstitute of Environmental Engineering

educational division (faculty/institute/academy) as higher education programme developer

COURSES' DESCRIPTION

Environmental Philosophy course title

Recommended by the Didactic Council for the Education Field of:

44.04.02 Psychological and Pedagogical Education

field of studies / speciality code and title

The course instruction is implemented within the professional education programme of higher education:

Environmental Pedagogy

higher education programme profile/specialisation title

Subject	Green Economy and Sustainability
Discipling values	Assessment Tools
Discipline volume	4 4E (144 hours)
Module	Topic
Sustainability and circular economy	Basic principles of the circular economy. Circular economy model. Infrastructure of the circular economy. Theoretical foundations of the circular economy. Formation of the subject area, concept and features. The concept of "cradle to cradle". The model of the circular economy and the stages of its formation. Indicators of sustainable development in the field of waste management. Basic principles of the circular economy in the field of waste management.
2. Climate-neutral resource management	Contribution of the waste management sector to the Earth's climate. Water resources and climate change. Adaptation and mitigation strategies.
3. Cleaner production	Drinking Water treatment. Water properties, water treatment stages.
4. Green technologies in wastewater treatment	Basic characteristics of wastewater. Oil and grease. Other important wastewater characteristics. Aerobic, anoxic, anaerobic biological treatment. Aerobic biological treatment. Anoxic biological treatment. Anaerobic biological treatment. Microorganisms in wastewater. Biological cells. Ecology of biological wastewater treatment. Reaction kinetics.

Signature

Developer:

Professor of the Department of Environmental Safety and Product Quality Management Department

A.I. KurbatovaName

HEAD OF THE DEPARTMENT:

Head of the Department of Environmental Safety and Product Quality Management		Savenkova E.V.
Department	Signature	Name
HEAD OF THE HIGHER EDUCATION PROGRAM: Professor of the Department of Foreign Languages		Zakirova Yu.L.

Name of the dissipline	Cocial acology /
Name of the discipline	Social ecology / Социальная экология
Scope of the discipline	3 Credit (108 ac. h.)
Summary of t	, ,
Section's name (topics) of the discipline	Summary of the sections (topics) of the discipline:
Topic 1. The history of the development of ecological ideas from ancient times to the present day.	Ideas about nature in the era of antiquity. Ancient Greek philosophers on the relationship between man and nature The development of scientific views in the Middle Ages. The beginning of the development of ecological ideas - the works of Malthus, Gu Mbolt, C. Darwin. E. Haeckel introduced the term ecology. Development of the main directions of ecology.
Topic 2. The emergence, formation and development of social ecology as an independent science.	The works of R.Park, E.Burgess, R.Mackenzie law of social ecology (S.E.). The main difficulties in the formation of S.E. as an independent science. Different views on the
Topic 3. The subject of social ecology, basic concepts, laws and principles.	The development of a unified approach to understanding the subject of S.E. is one of the most important tasks at the present stage. The principle of complex consideration of phenomena. Two approaches to the analysis of phenomena reductionist, holistic. The principle of natural chain reactions. The law of internal dynamic equilibrium. The law of reducing the energy efficiency of environmental management. The principle of incompleteness of information about ecosystems. The principle of deceptive well-being. The rule of one and ten percent. The principle of optimality. The principle of accumulation of pollutants in food chains. The principle of self-purification of ecosystems. N.F. Reimers on the rules and laws of S. Etym.
Topic 4. Human and the environment.	The place of human in the system of the organic world. Human characteristics, levels of consideration. The human environment as a complex formation integrating many components. D.J.Markovich about the human

	environment. The natural and social component of the environment. Atmosphere, lithosphere, hydrosphere, flora and fauna. Classification of N.F. Reimers. The social environment and its impact on a person. A model of the human environment by L.V.Maksimova.General properties of the human environment. The main aspects of the study of human relations with the environment. Problems of human adaptation to the environmentHuman adaptation to the natural and social environment. V.P.Alekseev on phenomenoacclimatization and genoacclimatization. The concepts of acclimation and acclimatization. Adaptation mechanisms
Topic 5. The relationship between society and nature in the history of civilization.	Historical periodization of the relationship between society and nature from the point of view of human economic activity according to B.B. Prokhorov. The era of hunting-gathering culture. Animism, totemism, fetishism, magic as ways of explaining the relationship between man and nature. agricultural culture. Neolithic revolution and its consequences. Population growth in different eras. The first legislative acts on environmental protection. The development of relations to nature in the era of industrial society and the post-industrial era. Way to harmonize the relationship between man and nature.
Topic 6. Biosphere and noosphere.	E. Suess about the biosphere as a space filled with life. The doctrine of the biosphere, created by V.I. Vernadsky. Hydrosphere, atmosphere and lithosphere. Functional connections in the biosphere. The biosphere as an integral system. Biodiversity is a fundamental condition for the sustainable existence of life. Man's place in the biosphere. The concept of the noosphere, developed by V.I. Vernadsky. The duality of the position of man in the biosphere. Man is a biological object, man is a social system.
Topic 7. Human impact on the environment.	Changes related to human activity and violations of the laws and principles of ecology. Changing the boundaries of optimal and limiting factors. Changing factors and

	mechanisms of population size regulation. Human impact on the functioning of ecosystems. Violation of the rule of ecological pyramids. Impact on ecosystem dynamics, functions of living matter. Strengthening of destructive processes. Consequences of differences in the rates of social and technological progress. The problem of human alienation from nature. Ecological crises in the development of the biosphere and civilizations by N.F. Reimers.
Topic 8. Pollution of the natural environment.	Atmospheric pollution. Problems of water resources. Some ways to solve water problems. Problems of land resources and soil use.
Topic 9. Protection of the natural environment. The problem of biodiversity.	Problems of using forests and other biological resources. The impact of recreational loads on forests. Recreational forestry. Conservation of biodiversity as a basis for sustainable development. The role of man in preserving the species diversity of living organisms. Specially protected areas.
Topic 10. Global socio-ecological problems.	The problem of population growth. Demographic problems in different countries. Pyramids of age composition in developed and developing countries. Demographic explosion. Regional features of the dynamics of the world population. The reasons for the high birth rate in developing countries. Demographic forecasts. Concepts of stabilization and population reduction. Demographic transition according to B.Nebel. Population regulation through the policy of birth control. V.A.Krasilov on the negative consequences of population growth.

Developers:

Associate Professor of the Department of Environmental Management	the bong	Rebouh N.Y
Должность, БУП	Подпись	Фамилия И.О.

Subject	Green Economy and Sustainability
D: : 1: 1	Assessment Tools
Discipline volume	4 4E (144 hours)
Module Discipline outline Topic	
Module	Topic
1. Sustainability and circular economy	Basic principles of the circular economy. Circular economy model. Infrastructure of the circular economy. Theoretical foundations of the circular economy. Formation of the subject area, concept and features. The concept of "cradle to cradle". The model of the circular economy and the stages of its formation. Indicators of sustainable development in the field of waste management. Basic principles of the circular economy in the field of waste management.
2. Climate-neutral resource management	Contribution of the waste management sector to the Earth's climate. Water resources and climate change. Adaptation and mitigation strategies.
3. Cleaner production	Drinking Water treatment. Water properties, water treatment stages.
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PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA NAMED AFTER PATRICE LUMUMBA **RUDN** University

Institute of Environmental Engineering

educational division - faculty/institute/academy

COURSE DESCRIPTION

Applied Ecology

Environmental pedagogy; 44.04.02 "Psychological and pedagogical education" field of studies / speciality code and title

Course Title	Applied Ecology		
Course Workload	4 Credits/ 144 academic hours		
Course contents			
Course Module Title	Brief Description of the Module Content		
1. Global environmental problems	The laws of the relationship between nature and man. Modern environmental problems as a consequence of violation of the law of nature management		
2. Natural resources, their study, use and conservation	Natural resources and their types. Economic and environmental assessment of		
Conservation	natural resources. Resource cost estimation.		
3. Environmental problems of nature	Industrial nature management. Environmental problems of the mining industry and their		
management and solutions	solution.		
	Environmental problems of energy sector and their solution.		
	Environmental problems of agriculture and their solution		
	Civil engineering and green building		
4. Mechanisms of nature management	State regulation of environmental management. Economic methods of regulation.		
	Information methods of environmental		
	management and solving environmental		
	problems.		
	Elimination of accumulated harm. Application		
	of the best available technologies.		

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Margarita Redina

HEAD



OF EDUCATIONAL DEPARTMENT

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Environmental Culture: Genesis and Modern Issues
Course Workload	3 (108)
course contents	
Course Module Title	Brief Description of the Module Content
1. Introduction to ecological culture.	Introduction to the problem of ecological culture. History of development and formation of ecological culture. Theoretical foundations of ecological culture.
2. The concept of sustainable development as the basis for the formation of modern ecological culture.	Biosphere from the standpoint of ecological culture. Environmental dimension of sustainable development. Global environmental challenges and environmental problems in socio-cultural, political and economic contexts.
3. Mechanisms and factors of ecological culture formation.	International agreements in the field of environmental protection. Ecological policy of the state: mechanisms and factors of ecological culture formation. Participation of youth in making environmentally significant decisions and methods for resolving environmental conflicts.
4. Formation of ecological culture.	Formation of ecological culture of youth and priorities of Russian environmental policy. Ecological culture of business activity. Regional and municipal programs of ecological education and enlightenment.

Developer:

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

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Course Workload	3 (108)
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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Environmental Didactics
Course Workload	4 (144)
	course contents
Course Module Title	Brief Description of the Module Content
Sources of formation of the theory and methods of teaching ecology. Requirements for the professional activities of an environmental teacher	Theory and methods of teaching ecology: its place and significance in education. History of environmental education. The system of environmental education. Goals of environmental education. Education in ecology. Features of the professional activity of the teacher-ecologist. Qualification characteristic of the teacher-ecologist. Professional functions of the teacher-ecologist. The educational function of the teacher-ecologist. Requirements
3. Ecology teaching methods.	for the personality of the teacher. Ecology teaching methods. Methods of formation and development of ecological concepts. Methods of formation of skills. Pedagogical technologies in teaching ecology.
4. Forms of teaching ecology.	The system of forms of teaching ecology. General characteristics of the forms of teaching ecology. The lesson as the main and very first form of education in the history of the school. Excursion as an extracurricular form of environmental education.
5. Material base of teaching ecology.	Material base of teaching ecology. An office, a mini-zoo, an educational and experimental site with an environmental department. Methodology for monitoring plant communities, monitoring the air environment.

Developer:

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Environmental Didactics
Course Workload	4 (144)
	course contents
Course Module Title	Brief Description of the Module Content
Sources of formation of the theory and methods of teaching ecology. Requirements for the professional activities of an environmental teacher	Theory and methods of teaching ecology: its place and significance in education. History of environmental education. The system of environmental education. Goals of environmental education. Education in ecology. Features of the professional activity of the teacher-ecologist. Qualification characteristic of the teacher-ecologist. Professional functions of the teacher-ecologist. The educational function of the teacher-ecologist. Requirements
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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program 44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Environmental Education
Course Workload	3 (108)
	course contents
Course Module Title	Brief Description of the Module Content
1. General concepts of environmental education	The concept of environmental education. The main goal of environmental education. The relevance of environmental education in the context of the global environmental crisis. The main categories and concepts of environmental education from psychological and pedagogical positions.
2. Formation of environmental education	History of environmental education. Modern research in the field of environmental education as research at the intersection of philosophy, ecology, psychology and pedagogy. Environmental education in the analysis of general strategies for its formation and development in Russia.
3.Environmental education as a leading factor in the implementation of the concept of sustainable development	Environmental education as a leading factor in the implementation of the concept of sustainable development. Socio-ecological aspects of environmental education and the formation of environmental consciousness. Goals, objectives, content and main forms of organization of environmental education. Pedagogical and psychological approaches to environmental education, their relationship.
4. Education by nature: methodological aspects of environmental education	Historiogenesis of nature-oriented activity of students. The essential characteristic of the concept of "nature-oriented activity of students". The structure of nature-oriented activity of students as a condition for the formation of environmental consciousness. Typology and main forms of nature-oriented activity of students. Peculiarities of students' assimilation of environmentally oriented values as the semantic core of the emerging ecological consciousness. Developing environmental educational environment as a set of conditions for the implementation of nature-oriented activities by students, its structure, requirements for its theoretical design and practical implementation. The essence of the methodological model of environmental education "Education by nature". Traditional forms and methods of assessing and evaluating knowledge, skills, and activity skills, characterizing the formation stages of competencies.

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Institute of Environmental Engineering

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Educational program 44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

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Course Workload	3 (108)
	course contents
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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Environmental Ethics
Course Workload	3 (108)
	course contents
Course Module Title	Brief Description of the Module Content
1. Concepts and elements of environmental ethics.	The moral aspect of the relationship between man, society and nature. Nature as a value. Non-violence as a form of attitude towards nature and as a moral principle. The problem of non-violent interaction between man, society and nature in various religious concepts (Jainism, Buddhism, Hinduism, Taoism,
2. Environmental ethics as a science.	Islam, Christianity). Ethics is biological, ecological and medical. The subject and tasks of environmental ethics. The relevance of environmental ethics and its problematic field. Definition of environmental
	ethics as a science. Normative aspect of environmental ethics: environmental imperative. Approaches to the problems of environmental ethics: anthropocentrism, biocentrism, ecocentrism. Principles of priority in resolving conflict situations (according to P. Taylor).
3. Environmental ethics.	Animal rights: history and modernity. Ethics of scientific research using animals. The problem of keeping pets. The problem of homeless animals. Biodiversity. The reason for the popularity of the concept. Biodiversity levels and ethical issues. Wildlife values. Tree or house: the choice of a metropolis (ecological and ethical analysis of the problems of a big city). Weekdays of one ordinary landfill. Ecological act and small deeds. The Ethics of Ecological Catastrophes: The Globalization of Responsibility. environmental movement.
4. Biological ethics.	Ethics is biological, ecological and medical. Ethics of genetic identity. Moral and ethical problems of conducting tests and experiments on humans and animals. Ethical aspects of demographic problems. Multidimensional concept of quality of life: psychological, social, physical and spiritual well-being.

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Concept of Environmental Pedagogy
Course Workload	4 (144)
	course contents
Course Module Title	Brief Description of the Module Content
1. Setting the scene.	Concern for the environment. Environmental pedagogy: international development and progress. Threads of a Brief Description of the Module Content: principles and structure. The National Curriculum.
2. The essence, content and strategy of environmental education in modern Russia.	The general concept of environmental education. The main goal of environmental education in the relevance of environmental education in the context of the global environmental crisis. The formation of environmental education. Modern research in the field of environmental education as research at the intersection of philosophy, human ecology, psychology and pedagogy. Environmental education as a leading factor in the implementation of the concept of sustainable development. Philosophical foundations of the formation of modern ecological outlook Socio-ecological aspects of ecological education and formation of ecological consciousness. Environmental education in the analysis of general strategies for its formation and development in Russia. Goals, objectives, content and main forms of organization of environmental education. Pedagogical and psychological approaches to environmental education, their relationship. Traditional approach. The main categories and concepts of environmental education from psychological and pedagogical positions.
3. Pedagogical foundations of environmental education	Structure and content of environmental education. Principles, methods and means of environmental education. Organizational and methodological foundations of environmental education.
4. Environmental education in schools.	Planning and practice at the primary level. Primary to secondary: a time of transition. Planning and practice at the secondary level. The out-of-school (field work) approach.

Developer:

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Head of the Higher Education program

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Environmental Philosophy		
Course Workload	4 (144)		
	course contents		
Course Module Title	Brief Description of the Module Content		
1. Philosophy of Science	Philosophy and science in the system of culture, in the history of knowledge and practice. The specifics of the philosophical problems of science. Philosophy, science and technology in the system of culture and in the history of knowledge and practice. The main directions and problems of modern philosophy of science. Types of scientific rationality. Gnoseological and methodological foundations of scientific knowledge. The structure of scientific knowledge. empirical and theoretical knowledge. Mathematization of science. The problem of truth in science. Methodology of scientific knowledge. System methods in science. Mechanisms and socio-cultural aspects of the development of science and technology.		
2. Environmental philosophy	Philosophical problems of ecology and other life sciences. Philosophical problems of biology: modern theory of evolution, evolutionary and forest genetics. Philosophical problems of social ecology. Ecological ethics and ethics of scientific and technical activity. Philosophical problems of forest sciences. Modern trends and prospects for global processes and possible solutions to global problems of our time. Philosophical problems of landscape architecture and gardening art. Ecological aesthetics and its role in solving environmental problems. Methodological problems of ecosystem modeling and environmental design.		

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Course Workload	4 (144)		
	course contents		
Course Module Title	Brief Description of the Module Content		
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COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Concept of Environmental Psychology		
Course Workload	4 (144)		
	course contents		
Course Module Title	Brief Description of the Module Content		
1. Environmental Psychology: History, Scope, and Methods.	The concept of the object, the subject of environmental psychology. The generality of the object and the difference in the subject in various areas of environmental psychology. System relations "individual-environment", "manenvironment" and "man-nature" Psychological ecology. Subject, methodological features and main categories of psychological ecology. Features of interaction in the "individual-environment" system. The idea of an ecologically unfavorable environment. Influence of psychogenic environmental factors on the mental state and development of the human psyche. Origins and causes of the ecological approach in psychology (K. Levin, J. Gibson). The psychology of global change as a direction of environmental psychology, focused on the study of the characteristics of perception and comprehension,		
2. Environmental influences on human behavior and wellbeing.	Environmental risk perception. Climate Change as a Unique Environmental Problem. Scenic Beauty: Visual Landscape Assessment and Human Landscape Perception. Health Benefits of Nature. Restorative Environments. Ambivalence Towards Nature and Natural Landscapes. Human Dimensions of Wildlife. Children and the Natural Environment. Appraising and Designing Built Environments that Promote Well-Being and Healthy Behavior. Urban Environmental Quality. Environment and Quality of Life. Place attachment. Environmental Issues in Low- and Middle-Income Countries.		

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Head of the Higher Education program

Associate Professor of the Department of Foreign Languages ducational department initials>surname



Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Concept of Environmental Psychology	
Course Workload	4 (144)	
course contents		
Course Module Title	Brief Description of the Module Content	
1. Environmental Psychology: History, Scope, and Methods.	The concept of the object, the subject of environmental psychology. The generality of the object and the difference in the subject in various areas of environmental psychology. System relations "individual-environment", "manenvironment" and "man-nature" Psychological ecology. Subject, methodological features and main categories of psychological ecology. Features of interaction in the "individual-environment" system. The idea of an ecologically unfavorable environment. Influence of psychogenic environmental factors on the mental state and development of the human psyche. Origins and causes of the ecological approach in psychology (K. Levin, J. Gibson). The psychology of global change as a direction of environmental psychology, focused on the study of the characteristics of perception and comprehension,	
2. Environmental influences on human behavior and wellbeing.	Environmental risk perception. Climate Change as a Unique Environmental Problem. Scenic Beauty: Visual Landscape Assessment and Human Landscape Perception. Health Benefits of Nature. Restorative Environments. Ambivalence Towards Nature and Natural Landscapes. Human Dimensions of Wildlife. Children and the Natural Environment. Appraising and Designing Built Environments that Promote Well-Being and Healthy Behavior. Urban Environmental Quality. Environment and Quality of Life. Place attachment. Environmental Issues in Low- and Middle-Income Countries.	

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Humanitarian Ecology	
Course Workload	4 (144)	
course contents		
Course Module Title	Brief Description of the Module Content	
1. Fundamentals of Humanitarian Ecology.	The history of ideas about Humanitarian Ecology. The structure of Humanitarian Ecology in the context of global problems of mankind. Methods of Humanitarian Ecology. International conceptual solutions in the field of Humanitarian Ecology.	
2. Humanitarian Ecology in the system of natural and human sciences.	"Russian cosmism" as a theoretical basis for Humanitarian Ecology. Environmental ethics. Ecological outlook. noospheric paradigm. Humanitarian aspects of interaction between society and nature. Philosophical problems of ecology and other life sciences. Modern trends and prospects for global processes and possible solutions to global problems of our time. Ecological aesthetics and its role in solving environmental problems.	

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Humanitarian Ecology	
Course Workload	4 (144)	
course contents		
Course Module Title	Brief Description of the Module Content	
1. Fundamentals of Humanitarian Ecology.	The history of ideas about Humanitarian Ecology. The structure of Humanitarian Ecology in the context of global problems of mankind. Methods of Humanitarian Ecology. International conceptual solutions in the field of Humanitarian Ecology.	
2. Humanitarian Ecology in the system of natural and human sciences.	"Russian cosmism" as a theoretical basis for Humanitarian Ecology. Environmental ethics. Ecological outlook. noospheric paradigm. Humanitarian aspects of interaction between society and nature. Philosophical problems of ecology and other life sciences. Modern trends and prospects for global processes and possible solutions to global problems of our time. Ecological aesthetics and its role in solving environmental problems.	

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COURSE SYLLABUS SUMMARY

Educational Programme

44.04.02 Психолого-педагогическое образование Master's Programme "Environmental Pedagogy"

Course title	RUSSIAN AS A FOREIGNER LANGUAGE
Number of credits (hours)	6 (216)
Course	content
Name of chapter	Chapter's content
Chapter 1. Introductory course of Phonetics and Grammar	Russian alphabet. Greeting. Construction <i>Kmo это?</i> Personal pronouns. Acquaintance. Names of products. Constructions <i>Что это? Это молоко? Да, это молоко</i> . Accusative case in the constructions \mathcal{A} (не) ем \mathcal{A} (не) люблю Numbers 1 - 1000. Pronunciation of telephone numbers. Construction <i>Сколько стоит</i> ?
	Adverbs of place (<i>mym</i> , <i>mam</i> , <i>cnpaвa</i> , <i>οκοπο</i> , etc.). Interrogative sentences with the word <i>где?</i> Names of monetary units (<i>pyбль</i> , <i>κοneŭκa</i>). Genders of nouns.Possessive Pronouns. Names
Chapter 2. Elementary Level	of persons of male and female sex. Constructions <i>Что такое? Что значит? Как по-русски?</i> Names of objects of the surrounding reality. Formation of Plural. Expression of time in the simple sentence. Adverbs of time, the names of the days of the week. Accusative Case. Nouns in Accusative Case. Russian Verbs. Verbs быть, хотеть, родиться, жить, работать, отдыхать, учиться, говорить, учить, понимать, сказать, знать. Constructions with the word должен (должен + инфинитив). Tenses of Russian Verb. Constructions <i>У меня есть/нет</i> . Nouns in Prepositional Case denoting location. Usage of prepositions <i>на</i> and в. Etiquette of telephone conversation. Verbs of Motion without prefixes. Verbs of Motion with prefixes. Ordinal numerals. Accusative, Genitive and Dative Cases with verbs of motion. Health. Possessive pronoun <i>себя</i> . Impersonal constructions with words <i>можено</i> , <i>нужено</i> , <i>нельзя</i> .
Chapter 3. Verbs of Motion	Verbs of Motion without prefixes. Verbs of Motion with prefixes. Ordinal numerals. Accusative, Genitive and Dative Cases with verbs of motion.
Chapter 4. Verbal Aspects	Verbal aspects. Usage of Perfective and Imperfective verbs in the Past, Present, Future, in Infinitive and in Imperative.

Developed by

PhD, Associate Professor of the Russian Language Department, Russian Language Institute, RUDN University

Head of the Russian Language Department, Russian Language Institute, RUDN University

Head of the Higher Education programme
Professor of the Department of Environmental

Safety and Product Quality Management

N.S. Novikova

A. Hof -

I.A. Pugachev

M.M. Redina

Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Psychology of Environmental Behavior
Course Workload	4 (144)
	course contents
Course Module Title	Brief Description of the Module Content
1. Measuring Environmental	Environmental behavior. Environmental impact.
Behavior	Multidimensional Measures of Environmental Behavior. A
	Unidimensional Measure of Environmental Behavior.
2. Symbolic Aspects of	Identity. Environmental Self-Identity and Behavior. Factors
Environmental Behavior	Influencing Identity. Impression management.
3. Theories to Explain	Theory of Planned Behaviour. Protection Motivation Theory.
Environmental Behavior	The Norm Activation Model. The Value-Belief-Norm Theory
	of Environmentalism. Goal-Framing Theory.
4. Group Processes in	The Role of Group Processes in Environmental Issues,
Environmental Issues,	Attitudes, and Behaviors. Social Dilemmas: Motivational,
Attitudes, and Behaviors.	Individual, and Structural Aspects Influencing Cooperation.
	Types of Social Dilemmas. Motives in Social Dilemmas.
	Factors Promoting Cooperation. Group Norms guiding
	Environmental Attitudes and Behaviors. Group Members
	Influencing Environmental Attitudes and Behaviors. Group
	Identification Influencing Environmental Attitudes and
	Behaviors.

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Psychology of Environmental Behavior
Course Workload	4 (144)
	course contents
Course Module Title	Brief Description of the Module Content
1. Measuring Environmental	Environmental behavior. Environmental impact.
Behavior	Multidimensional Measures of Environmental Behavior. A
	Unidimensional Measure of Environmental Behavior.
2. Symbolic Aspects of	Identity. Environmental Self-Identity and Behavior. Factors
Environmental Behavior	Influencing Identity. Impression management.
3. Theories to Explain	Theory of Planned Behaviour. Protection Motivation Theory.
Environmental Behavior	The Norm Activation Model. The Value-Belief-Norm Theory
	of Environmentalism. Goal-Framing Theory.
4. Group Processes in	The Role of Group Processes in Environmental Issues,
Environmental Issues,	Attitudes, and Behaviors. Social Dilemmas: Motivational,
Attitudes, and Behaviors.	Individual, and Structural Aspects Influencing Cooperation.
	Types of Social Dilemmas. Motives in Social Dilemmas.
	Factors Promoting Cooperation. Group Norms guiding
	Environmental Attitudes and Behaviors. Group Members
	Influencing Environmental Attitudes and Behaviors. Group
	Identification Influencing Environmental Attitudes and
	Behaviors.

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program 44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Psychology of Environmental Consciousness
Course Workload	4 (144)
course contents	
Course Module Title	Brief Description of the Module Content
1. Fundamentals of the psychology of environmental consciousness.	Psychology of environmental consciousness. Definition and structure of environmental consciousness. Attitude to nature as a subject of psychological research. Archaic, anthropocentric, ecocentric and nature-centric types of environmental consciousness. Sociogenesis and ontogenesis of environmental consciousness.
2. Methods of diagnostics, formation and correction of ecological consciousness	Basic methods for diagnosing types of environmental consciousness. Methods for diagnosing a subjective attitude to nature. Methods of correction of environmental consciousness. The structure of environmental and psychological training. Designing an environmental and social educational environment.
3. The content of the pedagogical process of the formation of the ecological consciousness of the individual	Content of environmental education in the sphere of formation of environmental ideas of the individual. The content of environmental education in the sphere of formation of the individual's attitude to the natural world. The content of environmental education in the field of formation of strategies and technologies for interaction with the natural world.

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COURSE DESCRIPTION

Educational program 44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Psychology of Environmental Consciousness
Course Workload	4 (144)
course contents	
Course Module Title	Brief Description of the Module Content
1. Fundamentals of the psychology of environmental consciousness.	Psychology of environmental consciousness. Definition and structure of environmental consciousness. Attitude to nature as a subject of psychological research. Archaic, anthropocentric, ecocentric and nature-centric types of environmental consciousness. Sociogenesis and ontogenesis of environmental consciousness.
2. Methods of diagnostics, formation and correction of ecological consciousness	Basic methods for diagnosing types of environmental consciousness. Methods for diagnosing a subjective attitude to nature. Methods of correction of environmental consciousness. The structure of environmental and psychological training. Designing an environmental and social educational environment.
3. The content of the pedagogical process of the formation of the ecological consciousness of the individual	Content of environmental education in the sphere of formation of environmental ideas of the individual. The content of environmental education in the sphere of formation of the individual's attitude to the natural world. The content of environmental education in the field of formation of strategies and technologies for interaction with the natural world.

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Psychology of Environmental Perception and Emotions
Course Workload	4 (144)
course contents	
Course Module Title	Brief Description of the Module Content
1. Environmental perception and cognition.	Environmental Perception. Environmental Values and Attitudes. Personal Space. Subjective Risk Judgments. Risk,
	Values, and Morality. Morality and Ethics. Emotional Reactions to Environmental Risks.
2. Environmental stress.	Environmental Stress Theories. Environmental Changes and Stress. Conceptualizations of Stress. Stress As Cause and Effect. Physiology Of Stress. Effects of Environmental Stress. Noise. Crowding. Poor Housing. Poor Neighborhood Quality. Traffic congestion. General Adaptation Syndrome. Researching Stress: The Environmental Context. Measuring Stressors. Measuring Stress: Psychological Assessment.

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COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Psychology of Environmental Perception and Emotions
Course Workload	4 (144)
course contents	
Course Module Title	Brief Description of the Module Content
1. Environmental perception and cognition.	Environmental Perception. Environmental Values and Attitudes. Personal Space. Subjective Risk Judgments. Risk,
	Values, and Morality. Morality and Ethics. Emotional Reactions to Environmental Risks.
2. Environmental stress.	Environmental Stress Theories. Environmental Changes and Stress. Conceptualizations of Stress. Stress As Cause and Effect. Physiology Of Stress. Effects of Environmental Stress. Noise. Crowding. Poor Housing. Poor Neighborhood Quality. Traffic congestion. General Adaptation Syndrome. Researching Stress: The Environmental Context. Measuring Stressors. Measuring Stress: Psychological Assessment.

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Research Methods of Environmental Pedagogy and Psychology
Course Workload	3 (108)
	course contents
Course Module Title	Brief Description of the Module Content
1. Research Methods of Environmental Pedagogy	Functions of methodological knowledge. Modern pedagogical concepts, scientific approaches to the study of problems of environmental education. Methodological foundations of pedagogical scientific research. Theoretical research methods. Empirical research methods. Methodology for the organization of the experiment. Organization of ascertaining, forming and control experiment. Approbation of the research results. Implementation of research results into practice
2. Research Methods of Environmental Psychology	Theoretical and empirical knowledge in psychology. Methodology of experimental psychological research. Classification of research methods in psychology. Theory of psychological experiment. Design of the experiment and control of variables. Quasi-experiments. Systematization and specifics of experimental research in various fields of psychology. Correlation approach in testing psychological hypotheses. Measurement in psychology. Analysis and presentation of the results of psychological research.

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Institute of Environmental Engineering

COURSE DESCRIPTION

Educational program

44.04.02 "Psychological and pedagogical education" Master's program "Environmental Pedagogy"

Course title	Research Methods of Environmental Pedagogy and Psychology
Course Workload	3 (108)
	course contents
Course Module Title	Brief Description of the Module Content
1. Research Methods of Environmental Pedagogy	Functions of methodological knowledge. Modern pedagogical concepts, scientific approaches to the study of problems of environmental education. Methodological foundations of pedagogical scientific research. Theoretical research methods. Empirical research methods. Methodology for the organization of the experiment. Organization of ascertaining, forming and control experiment. Approbation of the research results. Implementation of research results into practice
2. Research Methods of Environmental Psychology	Theoretical and empirical knowledge in psychology. Methodology of experimental psychological research. Classification of research methods in psychology. Theory of psychological experiment. Design of the experiment and control of variables. Quasi-experiments. Systematization and specifics of experimental research in various fields of psychology. Correlation approach in testing psychological hypotheses. Measurement in psychology. Analysis and presentation of the results of psychological research.

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Head of the Higher Education program

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Institute of Environmental Engineering

COURSE DESCRIPTION

The course instruction is implemented within the professional education program of higher education: Environmental Pedagogy

44.04.02 Psychological and Pedagogical Education

Course Title	Fundamentals of Biodiversity
Course Workload	4 /144
Course	contents
Course Modules Title	Brief Description of the Module Content
1. Key terms and concepts	The concept of "biodiversity" and the history of its origin. Basic terms and concepts related to biological diversity: gene, genome, genotype, population, line, gene pool, variety, breed, strain, race, species, community, ecosystem, biosphere.
2. Measurement and evaluation of biological diversity	The levels and classification of biodiversity. Alpha-, beta-, gamma - and Epsilon-diversity. The basic parameters of biological diversity – species richness, abundance, species composition.
3. The diversity of life forms of living organisms	Life forms of plants and animals in the assessment of biological diversity. The concept of "life form". System of life forms of plants Raunchier K. and I. G. Serebryakov. Other approaches to distinguishing life forms in plants. Functional types. Life-forms of animals.
4. Alien, adventive species and biological invasions	Alien species and biological invasions. The impact of the introduction and unintentional introduction into the change of biodiversity. The concept of "alien or adventive species", "species", "aggressive exotic species"
5. The biodiversity conservation strategy	General idea of national and international measures for the conservation of biological diversity. The basic normative documents

DEVELOPER:

Associate Professor of the Department of Environmental Management Galina Vyacheslavovna Polynova



AGREED

HEAD OF THE HIGHER EDUCATION PROGRAM:

Associate Professor Zakirova Ylia Lvovna.

Name of department Signature Name

Chairperson of the (Methodological / didactic council)

HEAD OF THE DEPARTMENT:

Director of the Department of Environmental Management Kucher Dmitry Evgenievich

Institute of Environmental Engineering

COURSES' DESCRIPTION

The study of disciplines is carried out as part of the mastering of the Higher Education Program Environmental Pedagogy / Экологическая педагогика (англ.)

implemented in the Higher Education Field: 44.04.02 Psychological and pedagogical education/Психолого-педагогическое образование

Course title	Computer technologies in education		
Course Workload, credit	3 ЗЕ (108 час.)		
units /academic hours			
	Brief Course Content		
Course Modules	Course Modules and Contents:		
	The concept of information.		
	Types of information.		
The role of information in	Information and its properties.		
society	Search for information		
	The role of information activity in modern society: economic,		
	social, cultural, educational spheres		
The concept of	Informatization of society		
informatization and	Information potential of society		
information culture	Fundamentals of information culture		
Information technologies	The concept of information technology		
Information technologies and their evolution	Information technologies classification		
	Stages of the evolution of information technology		
The concept of information	Information and educational environment of an institution		
and educational	Components of the information and educational environment of		
environment	an educational institution. Network resources for the formation		
environment	of an electronic educational environment.		
	The concept of multimedia educational resources.		
Multimedia and electronic	Classification of multimedia educational resources.		
educational resources	Advantages and disadvantages of using multimedia in education.		
	Requirements for electronic educational resources.		
	The main components of information security		
Digital Security	Information security tools		
	Personal information protection		

Developer

Assistant Professor of the Department Rational nature management

Kapralova D.O.

HEAD OF THE HIGHER EDUCATION PRO

Course title	Fundamentals of Environmental Science
Number of credits (hours)	4 (144)
	Course content
Course modules	Theme
Module	Content
1. Introduction to General	Definition, purpose, tasks of ecology. Position in the system of
Ecology	sciences, structure.
2. Autecology	Ecology of organisms. Factorial ecology, concept of limiting factor, tolerance, optimum. The main abiotic and biotic factors of the environment and the adaptation of organisms to them. The concept of an ecological niche. Basic living environments.
3. Population Ecology	The nature of the distribution of organisms in space. Properties of a population group. Main characteristics of populations. Population structure of the species. Sex, age, spatial and ethological structures of populations. The concept of the dynamics and homeostasis of populations. General patterns of population regulation, modifying and regulating factors, main types of population dynamics
4. Synecology	Biocenosis and ecology of communities. Community as a set of interacting populations. Types of interaction between two species. The concept of an ecosystem. Functional diagram, structure and methods for studying ecosystems. The main components of ecosystems are autotrophs, heterotrophs and decomposers. Classification of ecosystems and their main types. Energy in ecosystems. Biosphere as the highest level of organization of living matter. biogeochemical cycles. Ecological succession as a process of ecosystem development. Development of ecosystems in space and time. Primary and secondary succession of ecosystems.
5. Anthropogenic impacts on the environment	Modern global environmental problems. Problems of exhaustion of natural resources and environmental pollution. City ecology. Environmental protection and rational use of natural resources.

DEVELOPER:

Associate Professor of the Department of Rational Nature Management Olga Evgenievna Polynova

AGREED

Head of the Higher Education Program:

Associate Professor Zakirova Ylia Lvovna.

Name of department

Signature

Name

Chairperson of the (Methodological / didactic council)

Head of the Department:

Director of the Department of Rational Nature Management Kucher Dmitry Evgenievich

