

Course description

Tempus project EcoBRU

Course name
Resource-saving approach for natural resources using

Teacher of geography, biology, ecology, having:
- professional knowledge of the subject;

Lecturer	Educational Institution
Course Director: Degodya Elena Jur'evna Other team members: Maltseva Elena Vladimirovna	Nosov Magnitogorsk state technical university, Magnitogorsk
Deficit definition	

The problem of knowledges is now becoming ever more relevant in the field of subsurface resources management due to aggravation interrelation between society and people. It be embodied in at all known sciences and be under study in school course of geography. Discrete role within the meaning of rational use of natural resources belongs comprehensive school because at school potential user of subsurface resources be given by educational background.

At the present time society is aware of that the main factors of sustainable growth be are the rational use of natural resources and the up-to-date technique, the base of such is be far-sighted use of resources by world community.

Consequently geography teachers are necessary the geographic education as promising direction of harmonic relations between society and people.

Required space in the training	Course level	Course type
The course is be use as stand-alone module or the next after by course " Ecological aspects in teaching of geography' and before by course " Bases of conception of the assessment of environmental impact" as part of package programme of further training of teachers of comprehensive schools.	The blocks of the academic program in geography with the consideration of the direction of management of natural resources in each block are use in this course.	Further training of teachers of comprehensive schools. The course format in Modle «Structure"

Target group	Duration	Languages
Geography teachers of comprehensive schools	36 hours	Russian

Conditions	
Conditions: presence necessity of the computer class, the opportunity hearers go online	Other requirements (if applicable) Access to electronic libraries, electronic maps, statistical materials

Ladderpoints (1 un.=36 h)	Total Hours	In-class work	Independent work (h)

1 credit of unit	36	26	10
------------------	----	----	----

Topicality for EcoBRU**

The specific link with the professional activity: Ending stocks of many types of natural resources makes us look for ways to make more rational use. Right decision of specific professional tasks, in terms of subsoil use not covered by the concepts of environmental protection, it is possible to successfully implement cost, i.e. make them long-term and continuous, only if they contribute to the economy of the use of labor and materials due to resource conservation.

Course objectives

1. Assessment of the role of natural resources in the world economy, the concept of the essence of the new approach to the use of resources in production, their absolute and relative limitations, determine the value of different types of natural resources, their distribution by country.
2. Education formation of subjective attitude towards nature and ecological behavior of schoolchildren, the principles of the use of all types of resources.
3. Planning and implementation of strategies and technologies for environmental interaction with nature and environmental values for the manifestation of personality.

	Educational objectives of the course (see list of verbs used for educational objectives formulating)	Methods and forms of educational process organization	Monitoring forms and evaluation
Knowledge	Knowledge of the terms on «Natural-resources potential», «Environment conservation»	Methods (online): verbal, visual (electronic maps, models, profiles, schedules) working with text and writing a synopsis forms of organization of educational process (online): lecture, educational excursion, seminar, discussion, conversation, ecological practical work, consultation, project work	test work on writing a synopsis test check
	Knowledge of classifications of natural resources of Russia and foreign countries, especially their placement	learning software, form of organization of educational process online-lesson, discussion	test
	The use of intellectual and creative abilities in the process of observation of the state of the environment, solutions geographical problems, independent acquisition of new knowledge	method of presentation of the problem form of organization of educational process - integrated learning lesson, allowing students to integrate new knowledge independently in their own knowledge	reports, presentations, abstracts - credit
Methodological and didactic competence	The use of motivational readiness associated with a further way of education	research methods of decision making, testing decisions and conclusions on the possible	test

		and need applying the knowledge	
	Solving problems in the definition of resource supply countries	partially search method	test
	Evaluation of the problems associated with the resourcing of individual countries and regions of the world	research method	credit
Interdisciplinary competence, social competence	Using the acquired knowledge and skills to analyze and evaluate different areas in terms of the relationships of natural, social, economic, technological objects and processes in terms of their development planning	practical work on the definition of mineral resource supply countries and regions	practical work defence
	Application of acquired knowledge and skills for understanding the place and role of geography in the modern world in various spheres of social life	research in geography lessons	conference (online)
	Comparison of quantitative and qualitative indicators of the level of development of regions Ability to ranking economic regions by geographical indicators, the natural resources Realization of interdisciplinary approach when analyzing different situations and make informed decisions	research work in geography lessons	credit

Themes / Content	Class work	Hours and tasks for independent work
Natural resources and their role in the global economy. Content and objectives of the course. Communication with other natural sciences. Geological reserves of minerals. International and Russian classification of natural resources. Especially the allocation of natural resources and regulation of the use of the natural resource potential in the global economy.	4	2
Problems associated with resource, assessment their level	4	2

and significance. Types of resources. Conditions of positioning and reliability of resource estimates. Uneven distribution of natural resources and the international geographical division of labor.		
Legal documents that provide activities for resource conservation. The Constitution of the Russian Federation, Federal Law "On Environmental Protection", "Subsoil Law" regulations environmental ministries and departments.	6	2
Methods and ways of resource saving examples of effective or ineffective implementation. Resource conservation as a concept of environmentally sound technology industries.	6	2
Assessment of the significance of resource saving as problems of various scales. Solutions to the problem of resource. Contradiction of resource saving and environmental problems. The variety of aspects of resource saving requiring special study and research, occupy an important place issues related to economics, organization and planning of logistics.	6	2

Forms of control and assessment			
Form of control	Percentage	Dates	Evaluation Criteria
Test	10 %	within the framework of learning course	Performing more than 85% of the tasks
Writing a synopsis	10 %	within the framework of learning course	Conciseness, consistency, design, literacy
Creating a presentation	10 %	within the framework of learning course	Contents correspond to the subject, the number of slides 10-15, explanatory synopsis for slideshow
Participation in the discussion	10%	within the framework of learning course	Active participation in the work. The use of professional terminology, the ability to make conclusions
Make a speech	10%	within the framework of learning course	Possession of oratorical skills, availability of information, the ability to answer questions on a given topic speech
Participation in the conference	20%	within the framework of learning	Active participation in the work. The use of professional terminology, the ability to make conclusions

		course	
Credit	30 %	at the completion of the course	"Credit"- student shows good knowledge of educational material on the topics of the course. While logical and consistent presented material, reveals the meaning of the question, gives the right answers to additional questions. «Fail» - listener is difficult respond to questions raised, give partial answers to the questions from the basic literature recommended for the course.

Terms and conditions of access to monitoring and assessment of knowledge (exam)	
class attendance, performance of the practical part of the course, participate in the creation of presentations, speeches at seminars, carry out a test	
Document type certifying the successful course viiting (Certificate?)	
certificate	
Organizational guidelines	
Venue: "NMSTU"	
The recommended number of participants 15	

Literature and educational materials				
Author	Year	Title	Pages number	Place of publication, publisher or an online link
Main literature				
Maksakovsky V.P.	2008	Economic and social geography of the world: A Textbook for Grade 10.educational institutions		M.: Prosveshcheniye
Alayev E.B.	1983	Socio-economic geography: conceptual and terminological dictionary.	350 p.	M.: Mysl
S.N.Bobylev, Khodzhayev A.Sh.	1997	Environmental Economics	272 p.	M: Mysl
Further literature				
Gurova T. F., Nazarenko L. V.	2005	Fundamentals of ecology and environmental management		M.: Izdatelstvo Oniks
Arustamov E. A.	2005	Nature management		M.: Izdatelsko-torgovaya korporatsiya «Dashkov i Ko
Drogomiretsky, I. I.	2011	Economics and	536 p.	Rostov-na-Donu: Feniks.

Kantor Ye. L. , Chikatuyeva. L. A.		Management in the use and protection of natural resources		
---------------------------------------	--	---	--	--