## Federal State Autonomous Educational Institution for Higher Education PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA (RUDN University)

**Educational Division (faculty/institute/academy):** Institute of Environmental Engineering

## COURSE SYLLABUS

## FOREIGN LANGUAGE FOR PROFESSIONAL COMMUNICATION

## **Recommended by the Didactic Council for the Education Field for the specialization:**

## **08.04.01** "Construction", **05.04.06** "Ecology and nature management"

The mastering of the course is carried out as part of the implementation of the main professional syllabus (Higher Education programme, specialization)

Environmental Engineering in Construction (master's programme)

**Moscow**, 2022

## 1. Course Goals and Objectives:

The goal of the course is the formation and mastery of students with the necessary and sufficient level of written and oral communicative competence to solve communicative problems in various fields of academic and professional activity in conditions of intercultural interaction.

## Objectives:

- formation and improvement of skills in working with foreign-language scientific literature in the direction of training in the implementation of research and production activities:
- formation and improvement of the skills of written translation of scientific literature in the direction of training;
- formation and improvement of written scientific speech skills:
- formation and improvement of oral scientific speech skills:
- formation and improvement of presentation skills of a scientific speech.

## 2. Course in Higher Education Programme Structure:

The course **«Foreign Language for Professional Communication»** refers to an obligatory part of block 1 of the curriculum.

Table No. 1 shows the previous and subsequent disciplines aimed at the formation of the competencies of the corresponding course in accordance with the competence matrix of EP HE.

### Table 1. Previous and subsequent courses aimed at building competencies

No.	Competences	Previous disciplines	Subsequent disciplines
General of	cultural/universal comp	etences	
	OK-5 OK-10, OK-11, OK-12 UK-4	Foreign language (bachelor's degree) Foreign language (additional sections) Foreign language in the format of common European competencies Fundamentals of scientific translation	Foreign language
General J	professional competenc	les	(postgraduate)
Professio		of professional activity)	
	PC-20	Foreign language (additional sections), Foreign language in the format of common European competencies, Fundamentals of scientific translation	
	PC-1		Foreign language (postgraduate)

## 3. Requirements to Learning Outcomes:

Cipher	Competence	<b>Competence achievement indicators</b> (within this discipline)
UK-4	Able to apply modern communication technologies, including in a foreign language(s), for academic and professional interaction	<ul> <li>UK-4.1 Able to establish contacts and organize communication in accordance with the needs of joint activities, using modern communication technologies.</li> <li>UK-4.2 Knows the basics of business documentation and uses professional vocabulary in foreign and Russian languages.</li> <li>UK-4.3 Able to organize a discussion of the results and present the results of research and project activities at various public events in Russian or a foreign language, choosing the most appropriate format.</li> </ul>

The process of studying the course is aimed at the formation of the following competencies according to the educational standard:

**Universal competence** – **4.** Ability to apply modern communication technologies, including in a foreign language(s), for academic and professional interaction.

## 4. Course Workload and Academic Activities

The course workload of «Foreign Language for Professional Communication» is 6 credits.

Table 4.1. Types of academic activitie	es during th	e period of the	HE prog	ramm	e masteri
Types of academic activities	Total hours	Semesters			
		1	2	3	
Contact academic hours					
Including:					
Lectures					
Seminars (workshops/tutorials)	98	36	36	26	
Lab works	Lab works				
Self-study		86	60	26	
Evaluation and assessment (exam; pass/fa	il	32	Pass/f	Pas	Exam
grading)			ail	s/fa	
			il		
Total course workload	hours	216			
	credits	6			

Table 4.1. Types of academic activities during the period of the HE programme mastering

### 5. Course content

#### **Table 5.1 Course modules and contents**

Course title	Foreign Language for Professional Communication				
Number of credits (hours)	6 (216)				
cours	se content				
course modules	theme				
Annotating, summarizing and reviewing	Fundamentals of scientific text compression.				
scientific texts	Basic principles and tasks of abstracting.				
	Abstract types. Compilation of summary a				
	review abstracts on scientific topics. Basic				
	principles and tasks of annotation.				
	Compilation of descriptive and abstract				
	annotations. Compilation of analytical				

	reviews of foreign-language scientific
	literature in the specialty
Translation of scientific literature	Scientific style. Scientific translation.
	Manifestations of interference in scientific
	speech at the level of translation. The
	specifics of the translation of scientific
	terms, units of measurement, formulas,
	graphs, proper names, geographical names,
	names of organizations. Ways to achieve
	adequacy and equivalence in the translation
	of scientific literature. The use of computer
	technology in translation. Written
	translation, oral translation from a sheet
	(with preparation) of scientific articles from
	a foreign language into Russian.
Writing and presentation of scientific work	Scientific text. Types of scientific texts, their
withing and presentation of selentine work	structure, paragraphing, division into
	paragraphs. Stratification of scientific
	literature vocabulary. Terminology and other
	indicators of scientific style. Terminology. A
	term in the language of science.
	Terminological systems. Term classes.
	Features of functioning in scientific texts of
	categories of parts of speech of a foreign
	language in comparison with Russian.
	Features of punctuation. Means of
	communication of the text, expressing the
	sequence of thoughts, explanation,
	clarification or argumentation of thought;
	adversarial-restrictive relations; final
	meaning. Conjunctions and compound
	constructions and their corresponding units
	in the Russian language. Syntax of scientific
	speech. Formulation of written work. Rules
	for citing, designing footnotes, rules for
	compiling a bibliography. Research work of
	a master student (message, report with a
	presentation, theses/scientific article on the
	topic of master's thesis): rules for
	construction, writing and presentation.
	Structural and compositional features of the
	presentation of the report on the defense of the qualification work of the undergraduate
Professional business communication	the qualification work of the undergraduate.
r totessional business communication	Intercultural communication and etiquette in the professional business sphere. Business
	Etiquette. business protocol. Etiquette in the
	negotiation process. Phases of the
	•
	negotiation process. Spheres of oral business communication: meetings, negotiations,
	reception of delegations, conversation with
	clients, telephone conversations. Norms of
	etiquette in oral business communication.

Verbal norms of etiquette and speech
etiquette formulas adopted when greeting,
meeting an employer (negotiating partner,
etc.), hiring, meeting a delegation,
formulating the topic of a conversation
(negotiations), introducing participants in a
business conversation, negotiations,
outlining the structure of a contract
(contracts, other documents). Etiquette in
business correspondence. Phraseology in the
language of written professional and
business communication, speech patterns,
clichés, politeness formulas. Types of
business letters, documents. Employment.
Summary. Business letters (request for
information, response to a request for
information). Business communication on
the phone.

## 6. Classroom equipment and technology support requirements

Classroom for Academic Activity Type	Classroom equipment	Specialized educational/laboratory equipment and materials for mastering the module
Lecture hall (room)		
Laboratory		
Seminar room	Classroom, equipped with a set of specialized furniture; a whiteboard; a personal computer with a standard package of office programmes; a set of devices includes portable multimedia projector, laptop, projection screen, Stable wireless Internet connection. Software: Microsoft Windows, MS Office / Office 365, MS Teams, Chrome (latest stable release), Skype	
Computer lab		
For students'self- study		

Table 6.1 Classroom equipment and technology support requirements

## 7. Recommended sources for course studies

## Main reading

- 1. Valeeva N.G. Introduction to the theory and practice of translation. M.: RUDN University, 2014. 145 p.
- 2. Dugalich N.V.Englishlanguage forscientificnyhgoals[Electronicresource]:Teaching aid. M.: RUDN University, 2017. 78 p.

- 3. *Mikova S.S.*Translation of the language of business communication [Text / electronic resource] M .: Publishing house of RUDN University, 2015. 225 p.
- 4. English Grammar in Use [Text]: A self-study reference and practice book for elementary learners of English with answers / R. Murphy. Fourth edition; Book in English. Cambridge: Cambridge University Press, 2015. 319 p.
- 5. *Wallwork Adrian*.English for Presentations at International Conferences, Second Edition [Electronic resource], 2016.http://www.ebooksz.net/2016/09/11/3829/

## Additional reading

*Bobrova S.E.*English - Russian. Theory and practice of translation [Electronic resource]: Testing papers and materials for seminars. - M.: Publishing House of RUDN University, 2015. - 42 p. *Bykova I.A.* Translation theory (cognitive-pragmatic aspect) [Text/electronic resource]: Textbook / I.A. Bykov. - 1st ed., add. ; Electronic text data. - M.: Publishing House of RUDN University, 2015. - 118 p.

*Lipatova N.A.*English verb tenses. Grammar tests = English verb. Test File [Text/electronic resource]: Teaching aid: In the 1st part, Part 1 / N.A. Lipatova, K.L. Ulanov; Ed. N.G.Valeeva. - Electronic text data. - M.: Publishing House of RUDN University, 2015. - 31 p.

Malykh E.A.A guide to the scientific style of speech. English [Electronic resource]:

Teaching aid. - M .: Publishing House of RUDN University. 2015.

*Popova E.N.*Improving reading skills [Electronic resource] = Improve Your Reading Skills: Educational and methodological guide / E.N. Popova, S.B. Tomashevich. - Electronic text data. - M .: Publishing house of RUDN University, 2015. - 51 p.opova E.N. We read, translate, discuss [Electronic resource] = Read, Translate and Discuss: Educational and methodological guide / E.N. Popov. - Electronic text data. - M.: Publishing House of RUDN University, 2015. - 51 p. *Serova L.K.*Abstracting [Text/electronic resource]: Teaching aid for students of technical specialties. - M.: Publishing House of RUDN University, 2017. - 68 p.

### Internet-based sources

Electronic libraries with access for RUDN students euronews.com: Sci-tech; euronews.com: Futuris; BBC LearningEnglish.com http://wwwmultitran.ruhttp://wwwebster.com Living English Episodehttps://english-online.fi/materials/1514#page1

## 8. Mid-Term Assessment and Evaluation Toolkit\*

Evaluation materials for students' intermediate certification in the course of «Foreign Language for Professional Communication» are presented in Appendix 1 to this work programme.

\*Assessment materials for the course are developed and executed in accordance with the requirements of the Regulations for the assessment and evaluation funds, approved by order of the rector dated 05.05.2016 No. 420, and include a list of competencies indicating the stages of their formation; description of indicators and criteria for assessing competencies at various stages of their formation, description of assessment scales; standard control tasks or other materials necessary to assess knowledge, skills and (or) experience of activity that characterize the stages of formation of competencies in the process of mastering the educational course; didactic materials that define the procedures for assessing knowledge, skills and (or) experience of activity that characterize the stages of competencies in the process of mastering the educational course; didactic materials that define the procedures for assessing knowledge, skills and (or) experience of activity that characterize the stages of competency formation).

**DEPARTMENT OF FOREIGN LANGUAGES** 

# **Assessment and Evaluation Fund**

**ON THE COURSE** 

## FOREIGN LANGUAGE FOR PROFESSIONAL COMMUNICATION

Direction

08.04.01 "Construction", 05.04.06 "Ecology and nature management"

Programme:

"Environmental Engineering in Construction"

Qualification of the graduate -

Master of Ecology and Nature Management

## Assessment and evaluation fund passport

Direction 08.04.01 "Construction", 05.04.06 "Ecology and nature management"

## Course: FOREIGN LANGUAGE FOR PROFESSIONAL COMMUNICATION

### Assessment and grading system and characteristics of the assessment scale

					Form	ns of contro	1	
Торіс			Active work in class	Independent	fur-sector 4 to 5		Point Topics	Score
	competence	Tests		Study				
Annotation, summarizing drafting scientific	' UK-4	6	12	18	16		36	
literature								
	Translation of scientific	UK-4						prese: scient by sp

	1			4	1 1				4 L	* 1
	texts	on		8	7	10	11	25	l [	
	specialties									Profession
										-business
										_
	Writing a	and	UK-4						100	
*Active work	c in the classroom means	s: a	survey of a co	mpleted in	dependent	task (submissi	on of anno	tations, a'	bstracts	

\*Active work in the classroom means: a survey of a completed independent task (submission of annotations, abstracts, translations, business letters, a report with a presentation on scientific work), participation in discussions, listening, as well as independent work of a student under the guidance of a teacher in the classroom.

Masters are required to submit all assignments within the time limits set by the course schedule. Works submitted late will not be evaluated, control works will not be rewritten.

#### Automatic assessment (credit based on the results of work in the semester):

Masters who scored 51-100 points based on the results of work for the semester receive an assessment

в according to the number of points scored.

Credit:

Masters who scored 35 - 50 points must pass the test.

Masters who have received 51 points or more for the work in the semester and who wish to improve their grade can score additional points when passing the test.

When passing the test, the master can receive up to 20 points.

Credit structure:

written test - up to 10 points

oral test - up to 10 points

TOTAL maximum score per test - 20 points

The number of points received in the test is added to the number of points received during the semester. The final grade is given according to the total score.

Total points	Final assessment
91	5
91-100	5
86 - 91	5 (B)
71-85	4€
61-70	3+ (D)
51 - 60	3€
21 - 51	2 (FX)
<21	2 (F)

#### JUDGING CRITERIA

# Section 1. Annotating, summarizing, compiling reviews of scientific literature in the specialty.

Annotation: quantity for 1 semester - 12 quantity for the 2nd semester - 12 quantity for the 3rd semester - 9

#### Annotation Grading Criteria:

-"Great" undergraduate (one score) logical and successively sets out content articles and detects understanding of the material read, reasonably uses commonly used cliche. There are no actual errors. The text of the abstract contains 1 defect in the content; one grammar mistake; -"Good" (0.75 points) - undergraduaterepresents annotation satisfying topics same

requirements, as for the rating "excellent", but has more shortcomings in the sequence and language design of the presented material; there are single factual inaccuracies;

- "satisfactory" (0.5 points) - the undergraduate finds a general understanding of the content of the text, but presents the material of the article inconsistently and makes mistakes in language design;

- "unsatisfactory" (0 points) - the undergraduate makes mistakes in understanding the text, distorts it meaning, the logic of the presentation of the material is violated.

Referencing: quantity for 1 semester - 16 quantity for the 2nd semester - 16 quantity for the 3rd semester - 17

Criteria for scoring abstracts:

1. Structure

Introduction	0.1
Identifies and presents the problems of the text in the introduction (relevance of the problem, genre of the document, type and tone of the text, outline of the main part)	
Main part	0.3
Represents the text objectively, neutrally (does not introduce additional, missing information in the text)	0.1
Selects and reproduces the most significant information	0.1
Presents text in a clear and structured way (follows the outline presented in introduction), does it spontaneously, naturally and with reason	0.1
Conclusion	0.1
Neutral: Reflects on a topic based on personal arguments and information, and information from the text	
Comparative: Compares the situation presented in the text with similar in Russia or in another country	
Argumentative: Presents and defends one's position on the topic of the text, clearly and justifying your point of view	
. Linguistic design and content	0.5
<i>Vocabulary</i> .Owns a vocabulary that allows you to speak on the proposed topic, providing a clear expression of thought and the absence of unjustified repetitions. Uses words in their main lexical meaning, in case necessary, easily uses periphrases to fill in situationally arising lexical gaps, correctly uses terminology.	0.16
<i>Grammar</i> .Correctly uses verb tenses, pronouns, determiners, all types of agreements, connectors, etc., characteristic of scientific speech. Draws up his speech in accordance with the rules of oral syntax, using syntactic scientific speech constructions	0.16
<i>Phonetics</i> .Pronunciation and intonation are characterized by clarity and naturalness. Speech is adequate to the situation of generation, having such parameters as addressing, loudness, expressiveness.	0.16
<i>Final grade:</i> 1 – "excellent"// 0.75 = "good" / 0.5 = GENERAL grade: 1 – "excellent"// 0.75 = "good" / 0.5 =	one

Compilation of reviews of scientific texts in the specialty: quantity for 1 semester - 2 quantity for the 2nd semester - 2 quantity for the 3rd semester - 2

## Criteria for scoring reviews:

1. Structure	0.5
Introduction	0.1
Identifies and presents the problems of texts in the introduction	
Main part	0.3
Presents texts objectively, neutrally (does not introduce additional,	0.1
information missing in the texts)	
Selects and reproduces the most significant information, compares various	0.1
points of view expressed in texts	
Presents text in a clear and structured way (follows the outline presented in	0.1
introduction), does it spontaneously, naturally and with reason	
Conclusion	0.1
2. Linguistic design and content	0.5

Vocabulary.Owns a vocabulary that allows you to speak on the proposed topic, providing a clear expression of thought and the absence of unjustified repetitions. Uses words in their main lexical meaning, in case necessary, easily uses periphrases to fill in situationally arising lexical gaps, correctly uses terminology.				
<i>Grammar</i> .Correctly uses verb tenses, pronouns, determiners, all types of agreements, connectors, etc., characteristic of scientific speech. Draws up his speech in accordance with the rules of oral syntax, using syntactic constructions of scientific speech.				
<i>Phonetics</i> . Pronunciation and intonation are characterized by clarity and naturalness. Speech is adequate to the situation of generation, having such parameters as addressing, loudness, expressiveness.				
<i>Final grade:</i> 1 – "excellent"// 0.75 = "good" / 0.5 = "satisfactory" / 0 = "unsatisfactory"	GENERAL	one		

#### Semester 1, 2

Annotation (number 12)  $\times$  1 (max. score) + abstract (number 16)  $\times$  1 (max. score) + review (number 2)  $\times$  1 (max. score) = 30 + testing (max score 6) = 36 points (topic score).

#### Semester 3

Annotation (number 9)  $\times$  1 (max. score) + abstract (number 17)  $\times$  1 (max. score) + review (number 2)  $\times$  1 (max. score) = 28 + testing (max score 6) = 34 points (topic score).

#### Section 2. Translation of scientific texts in the specialty.

Translation of scientific texts in the specialty. quantity for 1 semester - 17 Quantity for the 2nd semester - 17 quantity for the 3rd semester - 17

#### Grading criteria for the written translation of a scientific text.

"excellent" (1 point) - the undergraduate identifies the communicative task, the functional type and type of text, conveys the logical and compositional structure of the text, all the components of the content of the text, adequately reproduces the lexico-grammatical and stylistic means of scientific speech in the target language.
"good" (0.75 points) - the undergraduate identifies the communicative task, the functional type and type of text, conveys the logical and compositional structure of the text, all the components of the content of the text, adequately reproduces the lexico-grammatical and stylistic means of scientific speech in the target language, the undergraduate allows 2 -4 inaccuracies in the translation of the text; - "satisfactory" (0.5 points) - the undergraduate allows a large number of semantic

inaccuracies and has difficulty in conveying the grammatical and stylistic features of the presented text; -"unsatisfactory" (0 points) - the undergraduate performs an incomplete translation of the text and does not understand the meaning of what was read.

Translation (number 17)  $\times$  1 (max. score) = 17 + testing (max. score 8) = 25 points (topic score).

Section 3. Writing and presentation of scientific work in the specialty. Report with presentation: number per semester - 3. *Criteria for evaluating the report and presentation.*  1. *Structure*- the number of slides corresponds to the content and duration of the presentation (for a 7-minute presentation, it is recommended to use no more than 10 slides) - the presence of a title slide and a slide with conclusions (up to 0.5 points).

2. *visibility*- illustrations of good quality, with a clear image, the text is easy to read - visual aids (tables, charts, graphs, etc.) are used (up to 0.25 points).

3. *Design and customization-* the design of the slides corresponds to the topic, does not interfere with the perception of the content, the same design template is used for all slides of the presentation (up to 0.25 points). 4. *Content-* the report and presentation reflect the main stages of the study (problem, goal, hypothesis, progress, conclusions, resources); contain complete, understandable information on the topic of work; differ in spelling and punctuation literacy (up to 2 points).

3 =

5. Presentation requirements:

- the speaker is fluent in the content, clearly and competently presents the material;

- freely and correctly answers questions and comments of the audience;

- exactly within the limits of the regulations (7 minutes) (up to 2 points).

*Final* grade: 5 - "Great"// four = "Good" / "satisfactorily" / 0 =

"unsatisfactory"

Semester 1, 2

*Report with presentation (number 3)*  $\times$  5 (max. score) = 15 + testing (max. score 4) = 19 points (topic score).

Semester 3

*Report with presentation (number 3)*  $\times$  5 (*max. score*) = 15 + *testing (max. score 26 (pre-defense))* 4.41 *points (topic score).* 

#### Section 4. Professional and business communication.

Business letter: quantity per semester - 3.

Grading criteria for writing a business letter:

- "excellent" (5 points) - the undergraduate has the skills to write a business letter, maintains the structure, logic and sequence of presentation of business letters, uses turns and clichés typical for business communication. Doesn't make mistakes.

- "good" (4 points) - the undergraduate makes inaccuracies in the structure of the letter and 1-2 errors, non-rough lexical and grammatical errors.

- "satisfactory" (3 points) - the undergraduate makes violations in the style of writing a letter, makes 3-5 lexical and grammatical errors.

- "unsatisfactory" (0 points) - the undergraduate does not maintain the style of writing, there is no logic of presentation and the sequence of presentation is broken. Allows 6 or more errors.

Semester 1, 2 Business letter (number 3)  $\times$  5 (max. score) = 15 + testing (max. score 5) = 20 points (topic score).

#### **3. TASKS FOR CURRENT CONTROL AND CERTIFICATION OF STUDENTS**

#### 3.1. Typical task to test the skills of annotating and summarizing

#### 1) Perform text annotation

2) Perform an abstract of the text

#### **SCI-TECH science**

The recent announcement that outdoor airpollutionis carcinogenic to humans has caused huge reactions worldwide; provoking discussion in the press, within the scientific community, and among people in general.

(CNN) -- The air many of us breathe poses serious health risks, the World Health Organization says. On Thursday, it added cancer to the list.

Air pollution is a now officially a carcinogen, and there are no caveats about the new classification. "We know that it is causing cancer in humans," said spokesman Kurt Straif. In 2010, lung cancer resulting from air pollution took the lives of 223,000 people worldwide. As pollution levels climb, so will the rate of cancer, the WHO said.

And there is only one way to stop it: Clean up the air.

"We can't treat ourselves out of this cancer problem," said Chris Wild, who heads the WHO's cancer research wing, the International Agency for Research on Cancer.

The evaluation by the International Agency for Research on Cancer (IARC) is driven by findings from epidemiologic studies of millions of people living in Europe, North and South America, and Asia.

According to the IARC, there is sufficient evidence that exposure to outdoor air pollution causes lung cancer, and an increased risk of bladder cancer.

The air in China and India is known to be very polluted, but, surprisingly, the air in Northern Africa is, too.

Euronews' Claudio Rocco interviewed one of the authors of the report, scientist Dana Loomis.

"In China and in India much of what we see is due to coal burning," Loomis explained. "It's industry and all the industrial development that is taking place in those countries. Here in Northern Africa, of course, is mostly desert, with few people. The particulate pollution that we see there is from windblown desert dust. So it's quite different in character from the pollution coming from industry."

Loomis added that desert dust is not as dangerous as other sources of air pollution. But, according to an Italian study, it does produce fine particles and can cause a wide range of health problems, including respiratory diseases.

He said the situation in Europe is very variable, with heavy pockets of pollution in certain areas and other, cleaner regions:

"In Europe the main sources today are related to transport. That is vehicles, airplanes, and so on. It used to be industry, and today if you go to China or India it is industry, because those are the countries that are industrialising, much as Europe did 200 years ago," clarified Loomis.

When it comes to protection from polllution, Loomis explained, collective, rather than individual action needs to be taken:

"You know, air pollution is the classic public health problem, because the air belongs to everybody. We all breathe the same air, and so one person can't do very much to improve the quality of their own air. You can cycle to work, you can reduce your use of fossil fuel, but it doesn't help you very much. It helps the community. So it's good if everybody does those things. But it's also important for people to be aware of the problem, to recognize that it's a collective problem and to expect solutions at a governmental and international level."

Cleaner air would also have other health benefits.

Air pollution increases the risk of bladder cancer, it has been known for a while that it contributes to heart disease and respiratory ailments.

The problem is global, but people in developing countries with large populations and booming manufacturing sectors with few pollution controls are said to be particularly at risk.

"The predominant sources of outdoor air pollution are transportation, stationary power generation, industrial and agricultural emissions, and residential heating and cooking," the IARC said.

Outdoor dust can also contribute to cancer.

The agency decided upon the official classification of outdoor air pollution as carcinogenic after reviewing the latest scientific writings and coming to the conclusion that the evidence was ample.

The classification is an important step, said Dr. Christopher Wild, director of the IARC.

"There are effective ways to reduce air pollution and, given the scale of the exposure affecting people worldwide, this report should send a strong signal to the international community to take action without further delay."

The IARC called air pollution the most widespread environmental carcinogen and the worst. The most recent IARC data indicates that, in 2010, 223,000 of the deaths from lung cancer worldwide were the result of air pollution.

But how can we be sure that air pollution was the cause of these deaths? A relevant point, according to Loomis:

"That's a really important question. In fact, we can't be sure," he responded. "What we do is use statistical models to try to estimate the number of deaths that are due to a variety of different causes: air pollution; other environmental pollution; cigarette smoking. We use data about large populations from epidemiologic studies. So, it's an estimate, but we think it's a good estimate."

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Something in the airhttp://www.euronews.com/2013/10/21/something-in-the-air

http://uk.news.yahoo.com/video/carcinogenic-air-pollution-collective-issue-122504157.html

#### **3.2.** A typical task to test abstracting skills.

#### Perform an abstract translation of the text from Russian into English.

The "usefulness" of the properties of the geographical environment is determined by the needs of society. The extraction of useful properties in the interests of one branch of the economy often leads to a change in the degree of "usefulness" of other properties. For example, logging can lead to increased erosion, changes in the water regime of the territory, pollution of water bodies, etc.

Rational nature management provides for obtaining the maximum effect (social, economic, etc.) for an unlimited time. Such a system of activities is intended to provide the most effective regime for the renewal and economical exploitation of natural resources, taking into account the promising interests of a developing economy and the preservation of people's health.

The main directions of the rational use of mineral resources are their integrated development, the use of energy and resource-saving technologies in production, and the active introduction of secondary use of resources.

An example of deep recycling (reuse) of industrial and household waste is Japan, Western European countries, the USA.

Rational environmental management of water resources provides for measures to prevent pollution of watercourses and reservoirs.

The problem of nature management as a component of the global problem "man and the natural environment" is complex.

Firstly, this is an international (interstate) problem, since different countries take part in its solution. Secondly, this is an interdisciplinary problem, since many sciences are involved in its solution, among which geography plays an important role.

The dispute between experts about the advantages and disadvantages of alternative energy sources seems to be ending. It became clear that it is very important for humanity to look for new renewable resources.

Energy saving, as one of the elements of scientific and technological progress, has its own short history, starting from the beginning of the 70s of the last century. In most developed countries, decisions were made to develop special energy saving programs and to allocate huge budgetary funds for research and development. The fact is that during the 1980s significant progress was made in new technologies identified as priorities at the first stage. And these developments began to be actively implemented. These include heat pumps, wind generators, solar cells. It should be noted that at the same time very large funds were allocated for the public promotion of the energy saving program and the explanation of its goals to the consumer. http://www.orsha.by/?page\_id=48

# **3.3.** A typical task for testing the skills of written translation of a scientific text in the specialty.

#### Perform a written translation of the text from English into Russian.

INSTANT GREEN SCREENING - LOW MAINTENANCE GREENING SOLUTIONS - ENVIRONMENTAL BENEFITS

This Treebox green screen system takes advantage of the simple concept of encouraging natural climbing plants to cover an existing wall or structure. It is suitable for security fencing and graffiti prevention. Installed directly into the ground between posts, against an existing wall, or planted in bespoke troughs, they provide an instant green façade or screening effect.

#### **Key Advantages:**

This simple solution is based on the natural ability of ivy to grow rapidly. It is one of the most cost effective solutions on the market. Additional cover can easily be achieved by adding frames and encouraging growth over larger areas. Maintenance is easy with only periodic visits required.

We have got proven solution in green screen applications up to heights of 10 storeys and we give 10year warranty when maintained by the Treebox team.

**Best Applications** are urban locations that need a simple, low cost, low maintenance greening solution. The screens are supplied in two heights, 1.8 and 2.2m with green and variegated options.

It is especially good for areas where instant results are required for dust suppression, pollution reduction and noise abatement; eg a green screen around construction sites.

It offers temporary event solutions; eg a green screen around alfresco eating areas.

#### Considerations

Although fast growing ivy can take time to cover an area larger than the initial installation, ie beyond the initial pre-grown frame.

Limited color and textures available.

What Will It Take to 'Build the Wall'?

Having spent the better part of a year planning, strategizing, and building partnerships with agencies on the ground, the Treebox green screen initiative is beginning to report positive early results in Mexico.

The project's \$2 billion budget, stemming largely from World Bank co-financing and partnerships fostered by the Latin America Union, ensures participating countries will have the means to see the project through to the end.

Examples of success include more than 500 green screens planted in Mexico. Most of these are the ivy species, a small portion of the plants are also fruit-bearing, which, when mature, will help to put more colors in the streets.

Even more dramatic is the project's potential social impact.http://www.greenscreen.com/Resources/download\_it/IntroductionGreenW alls.pdf

## **3.4.** Typical task for compiling reviews of texts in the specialty. *Review the following texts.*

## A) Green energy: tomorrow's reality.

More than three million people across the EU now work in eco-industries, producing nature-friendly goods and services.

It is an increasingly competitive sector, buoyed by constant innovation.

Let's see how scientists and manufacturers are joining forces to support this industrial evolution.

Like in every big city, the air in London is increasingly polluted because of car fumes. One solution is to try and make all taxis emission-free by 2020.

A small fleet of hydrogen-powered taxis is being tested as part of this European project. These black cabs running on fuel cells rather than combustion engines are much cleaner and quieter.

"This vehicle drives entirely differently to anything I've driven before," says taxi driver Phil Davis. "It's much smoother, quieter, and it's a pleasure to drive. It's responsive, everything on it is electronic, which means less work for me to do. After getting out, after a few hours, it's like I've not been to work at all," he says.

A tank-full of hydrogen gives the taxi up to 400 kilometres autonomy. The tests should give researchers a better idea of how to make the vehicles lighter and more efficient.

Today, converting a car to hydrogen fuel increases its price five-fold - making it completely unaffordable. But at the current rate of research, it's hoped this technology can become more competitive in the next few years.

"There are standards that will still need to be put in place for hydrogen vehicles, but part of projects like this helps to address those issues. As we move towards commercialization of these vehicles in 2015, the required regulations will be addressed and in place, " says Diana Raine, project coordinator for the HyTEC (Hydrogen Transport for European Cities) project.

With a growing demand for clean fuels, governments and scientists need to get together to develop more efficient vehicles and better infrastructure.

The European Commissions' in-house science service, the Joint Research Center (JRC), based in northern Italy, works with a wide range of eco-industries.

In the JRC's vehicle emissions laboratory, tests are being carried out on new equipment that reduces harmful engine exhausts. "We look into different options, we assess these technologies, and then we share our conclusions with the car-making industry, setting the new standard of the future for these cars," says Alois Krasenbrink, Head of the JRC's Sustainable Transport Unit.

But is hydrogen a cleaner alternative if it relies on fossil fuels for its production? Are

electric cars running on batteries made of imported, rare earth compounds sustainable?

Scientists are looking not only at the final product but at its carbon footprint.

"It is certainly true that on a local level, on an urban level, electric and hydrogen fuelled vehicles are cleaner," says Laura Lonza, scientific officer in vehicle and fuel innovation at the JRC.

Laboratory analyzes of combusting engine emissions can differ from real-life situations. This new mobile device, developed at the Joint Research Center, fits in a car trunk and works while the vehicle is on the road.

"The device is connected to the exhaust pipe. The exhausts go to the fume meter. This allows us to measure directly the fume exhaust flow, and to extract a part of this flow which is then analyzed," says Alois Krasenbrink.

Mobile tools like this are able to provide much more accurate measurements. For example, these tests show that in certain real-life conditions, cars produce two to four times more emissions than in a lab.

I know "All that glitters is not gold" but this is an example where public money is being spent today.

Electric cars are far from being eco but their owners don't pay additional tax - London congestion charge.

Biodiesel from algae is sadly missing from this video. Hydrogen fuel cell sounds great and all, but driving around in a complex bomb is not. There is an old saying "keep it simple stupid" the designers need to revisit this concept. The solar segment in the video was wonderful, though I was hoping they would cover other systems as well. After all, we don't have a "silver bullet" we have a "silver buckshot", the public needs to know the many solutions we have, that are available now.

euronewsfuturis:

http://www.youtube.com/watch?v=POMkyF5hAxM&feature=youtube\_gdata

#### B) Morocco makes renewable energy progress

With over 300 days of sunshine per year, Ain Beni Mathar in Morocco, near the border with Algeria, was the perfect site to build a thermal and solar hybrid plant.

The first of its kind in Africa, Ain Beni Mathar is a real opportunity for Morocco to explore alternative sources.

The country suffers greatly from its energy dependence, importing 97% of its coal and oil energy needs.

The National Office of Energy and the African Development Bank have opened the doors of the plant to euronews. On a guided tour, the company's Chief Operating Officer Nour Eddine Fetian told us: "The principle is that the plant consists of two lines, two gas turbines, two heat recovery steam generators, one steam turbine and lines for production and energy discharge. So steam is produced by two sources: there is natural gas, under the normal combined cycle, and the steam produced by the solar field.

The total output of the power plant is 472 megawatts, 20MW of which is solar, allowing it to satisfy about 10% of the country's energy demand. Ain Beni Mathar is supplied with natural gas by the Maghreb / Europe pipeline.

Fetian Nour Eddine, the director of the Beni Mathar power plant also spoke about the intelligent energy recovery system: "So the combined cycle recovers energy from the exhaust gases to produce steam. Basically, after bring emitted, the exhaust gas enters a recovery boiler. The boiler is fueled by water and produces steam through heat exchangers. mechanism."

The plant uses an innovative cooling system. The giant fans are air-cooled condensers. They reduce water consumption by 5.3 million cubic meters per year and from at least one million cubic meters per year, there'll be an 80% saving of water.

The plant's director also explained how the cooling system works: "Since it operates in a closed cycle, the steam powering the turbine must condense. And so we need a cooling system. The system used in this plant is a dry cooling system, which minimises water consumption. So in effect, it becomes an air-water exchanger. Through the fans it draws in fresh air and is injected into a heat exchanger to condense the steam, recycle the water and resume the cycle early. But most importantly, it reduces water consumption by a very significant margin."

The solar array occupies 88,160 hectares of the site: the 3688 cylindrical and parabolic panels follow the sun's path. The site is a testing ground for Morocco. A 100% solar plant with a capacity of 2GW (giga watt) will soon come to Ouarzazate.

Fetian Nour Eddine, director of the Beni Mathar ISCC power plant said: "Here we have this parabolic format, which allows the dish to track the exact position of the sun to maximize the radiation. It quickly reflects the rays back towards the collector. This is where you find a special tube that circulates the oil. The oil recovers the maximum recovered energy of solar radiation and then transfers that heat to the recovery boiler."

The plant meets strict environmental standards - allowing Morocco to save 12,000 tons of fuel oil per year. To halt its energy dependence, Morocco has implemented plans to produce 40% of renewable energy by 2020.

http://www.youtube.com/watch?v=ZbR81eIIa2g euronews hi-tech :

## 3.5. A typical task to test the skills and abilities of professional and business communication.

9. Arrange the parts of a business letter in the correct order.1. April 11, 1000

2. Yours sincerely

3. 1315 Allron Drive St. Paul. Minnesota 55151

4. Dear Mr. Jack Freeman

5. I would like to place the following order from your September catalogue:

-- 1 red, white and blue soccer ball, plastic \$1.67

-- 1 lightweight wool sweaters

--1 size 15-33, light green, pullover

#### 2. Determine what type of business document the following excerpts refer to..

B I have recently written an article about Lady Hester Stanhope for Kent County Magazine, and the editor has asked me to supply a photograph. I believe you have one in the National Gallery and I am writing to enquire if you would permit me to use it. Please let me know the fee you would charge.

в Dear Personnel Director:

I wish to apply for the full time opening you described in The Times last Sunday for a General Manager.

# **3.** Write a business letter requesting information to obtain information about the conditions of employment.

### 3.6. Typical questions to test speaking skills (monologue and dialogic speech).

#### I. Answer the following questions:

- 1. What kind of test is done to try to prove theories?
- 1. What is one group used in an experiment?
- 3. When do scientists come to a conclusion?
- 1. What are some factors that determine an area's climate?
- 5. What is a greenhouse gas? What are the primary greenhouse gases?
- 6. What is the main reason for disrupting the ecosystem?

#### II. Prepare a one-minute talk on the following topics and answer the

questions: 1. Talk about the Earth's structure and spheres.

- 1. Talk about landforms.
- 3. Talk about components of an ecosystem.
- 1. Talk about trophic levels.

5. Talk about terrestrial

biomes. Follow-up questions:

What are the parts of the atmosphere?

What landform is completely surrounded by water?

- What is an example of a habitat?
- What is an example of a producer?

What are some types of forest?

#### 3.7. Typical tasks for testing the skills of written scientific speech

#### 1) Write the application for research

*funds.* professor: Location of project: Description of project:

#### 1) Write the ecological

*report*.area: List populations that are threatened: What is threatening the population: What will probably happen to the population:

#### 3.8. Typical tasks for testing lexical and grammatical skills

#### 1) Fill the gaps.

1. We usually find out if there will be rain or snow tomorrow listening to the weather\_ on TV. a. forecast b. news c. questions d. answers 1. We could hardly see through the window because of the\_\_\_\_\_. a. cool b. mist c. warm d. rainbow 3. There are seven colors in a \_\_\_\_\_: red, orange, yellow, green, light blue, blue, violet. a. rainbow b. sun c. moon d. water 1. The weather is changeable and very difficult to \_\_\_\_\_ . a. say b. forecast c. expect d. see 5. In Britain the weather is \_\_\_\_\_\_. It may be rainy, then sunny and rainy again. a. changeable b. interesting c. misty d. dangerous 6. When the seamen want to know if there will be a storm they look at a\_\_\_\_\_ a. sea b. barometer c. map d. window 7. People always want to know more. It is \_\_\_\_\_ nature. a. human b. animal's c. people's d. insects' 8. Some people fall ill when it is very hot, they can't stand the\_\_\_\_\_. a. hotness b. warm c. heat d. dry 9. The climate is changing, it is getting warmer because of the\_\_\_\_

b. hot

c. greenhouse effect
d. rainbow
10. There used to be many old\_\_\_\_\_\_trees in the rainforests but there are few ones nowadays.
a. thin
b. huge c.
small d.
broken

#### 2) Put all the words in the correct order.

 on Fridays/in the cafe/eats breakfast/always/he safely/they/arrived/this morning/home drinks coffee/in the evening/never/Sam on a yacht/she sails/every summer/round the islands— quietly/in his bed/slept/the baby/all night often/home/she/goes/on Sundays/early rarely/you/see/cricket/these days/on TV in the garden/the nightingales/last night/loudly/were singing---9. early/ every/ he/ to get up/ day/Saturday/ has/except---10. later/ subject/ will/or/a bit/ a discussion/ have/ the/ you/ on/ now---

## 3) Choose the only correct answer.

1. You will spoil the work if you \_\_\_\_\_careful. a. won't be b. will not c. aren't d. don't be 1. If you harder, your teacher will certainly appreciate it. a. will work b. will be working c. shall work d. start working 3. If we\_\_\_\_\_time, we will discuss this problem. a. shall have b. has c. have d. had 1. I will be angry if he\_\_\_\_\_any more mistakes. a. makes b. would make c. will make d. making 5. We won't leave until it\_\_\_\_\_raining. a. doesn't stop b. won't stop c. isn't stop d. stops 6. If it \_\_\_\_\_rain in the morning, we \_\_\_\_\_\_visit our friends in the country a. isn't, will b. doesn't, will c. doesn't, are d. won't rain, are umbrellas with them, they by 7. If they rain. a. take, won't be caught b. will take, didn't catch c. took, won't be caught

d. have to take, will not catch 8. If we care of the nature, our planet in some years. a. don't take, is destroyed b. won't take, will be destroyed c. don't take, will be destroyed d. won't take, has been destroyed 9. –If it\_\_\_\_\_tomorrow, our trip\_\_\_\_\_. --So \_\_\_\_\_ours. a. rain, will spoil; will be b. raining, will be spoil; will be c. rains, will be spoiled; do d. rains, will be spoiled; will be 10. If people\_\_\_\_\_\_ the atmosphere, living standards\_\_\_\_\_higher. a. doesn't pollute, are b. don't pollute, will be c. is polluting, won't be d. will pollute, will be

## 3.9. Typical tasks for testing reading skills

#### 1) a) Read the text

Abraham Lincoln, the sixteenth President of the United States, was born on a farm in Kentucky, on February 11, 1809. Abraham's father made his living by farming and by working, from time to time as a carpenter. His mother died as he was only nine years old. Lincoln had no more than a year's education, but during that time he managed to learn reading, writing and arithmetic. As a young man, Abraham had many jobs, some of which involved him in journeys down the Mississippi where he could see auctions of Negro slaves. From that time on he became opposed to the idea of slavery.

b) Decide which statement is correcta. Lincoln's experience made

him go up against slavery.

b. Lincoln had difficulty finding a job as he knew little arithmetic, reading or writing.c. Abraham's father made him do a lot of farming and carpentry.d. Negro auctions made little impression on Lincoln.

### c) Determine Which Statement Is False.

a. Lincoln was born in the state of Kentucky.

b. Lincoln changed a lot of jobs, one of them--at an auction

of Negroes, down the Mississippi River.

c. Lincoln's mother died when he was a boy.

d. Lincoln's father was a farmer and a carpenter.

### 2) Read the text and translate it into Russian.

Water is necessary for life. It covers over 70% of the Earth's surface and is a very important resource for people and the environment. Plants and animals require water that is moderately pure, and they cannot survive if water contains toxic chemicals or harmful microorganisms. Water pollution kills large quantities of fish, birds, and other animals, in some cases killing everything in the affected area.

The major water pollutants are chemical, biological, and physical materials that lessen the water quality. Pollutants can be separated into several different classes:

The first class is petroleum products: oil, fuel, lubrication and plastics. Petroleum products get into water by accidental spills from ships, tanker trucks and when there are leaks from underground storage tanks.

The second class is pesticides and herbicides. If they penetrate into streams, rivers, lakes, these chemicals can be very dangerous. Going up through the food chain, the chemical becomes more harmful.

The third class is heavy metals, such as, mercury, selenium, uranium, radium, cesium, etc. They get into the water from industries, automobile exhausts, mines, and natural soil.

The fourth class is fertilizers and other nutrients, which are used to promote plant growth on farms and in gardens.

The fifth class is infectious organisms and pathogens. They enter water through sewage, storm drains, runoff from farms, etc.

The last one is thermal pollution. Water is taken from rivers, lakes or seas to be used in factories and power plants. It is usually returned to the source warmer than when it was taken. Even a small temperature change can drive away the fish and other species that were originally there, and attract other species in place of them. It breaks the balance and can cause serious circumstances in the future.

#### a) Answer the questions:

- 1. Why is water an important resource for people and the environment?
- 2. How does water pollution affect flora and fauna?
- 3. What is the main effect of water pollution?
- 4. What are the major water pollutants?
- 5. What classes can water pollutants be separated into?

#### b) Fill in the correct word from the list below: desertification,

awareness, sustainability, supply, rate, supplies

In every corner of the globe, we are polluting, diverting, pumping, and wasting our limited \_\_\_\_\_\_ of fresh water at an exponential \_\_\_\_\_\_ as population and technology grows, resulting in the \_\_\_\_\_\_ of the earth. We must begin to manage our water more efficiently and keep our limited freshwater \_\_\_\_\_\_ pure. Achieving a more \_\_\_\_\_\_ use of urban public water supplies requires not only the implementation of certain measures, but also raising public \_\_\_\_\_\_ on water conservation issues.

#### 4.0. Typical tasks for testing listening skills:

### a) You will hear a radio interview. What are the benefits and dangers of the sun?

#### b) true or false?

The sun is very good for skin complaints like acne. Sunlight acts on the skin to reduce Vitamin C. Sunlight is responsible for 85% of skin cancers. 80% of sun damage occurs before the age of 10.

#### c) Fill in the blanks.

For \_\_\_\_\_\_people the risk of \_\_\_\_\_\_ doubles every thousand kilometers nearer the \_\_\_\_\_\_ you go. It's the \_\_\_\_\_\_ that does the damage.

You should use a good \_\_\_\_\_\_ to increase that, but remember that \_\_\_\_\_\_ depends on how thinly you \_\_\_\_\_\_ on your skin.

Once your skin is tanned, the tan will protect your skin \_\_\_\_\_\_than an untanned skin, but it's a good idea to carry on using a light sunscreen all the same.

### Tapescript

### Benefits and Dangers of the Sun

PRESENTER: Thank you, John, for that report from Costa Rica. We'll have details of that and all the other holidays at the end of the programme. And now we come to the spot in the program where we focus on holiday health issues. I think there's no doubt that for many of us a golden tan is the ultimate goal of our annual holiday, and this week Carol has been looking into the benefits and dangers of the sun. What's the good news, Carol?

CAROL: Well, the sun does have several beneficial effects on

the skin. It stimulates the circulation, for example, and it's very good for skin complaints like acne. In addition, sunlight acts on the skin to produce Vitamin D, which is vital for our health. PRESENTER: I always think that the sun has a good psychological effect as well. Is that true?

CAROL: Yes, in fact there's evidence that a lack of sunlight

makes some people ill. So, if you work in artificial light, doctors think it's a good idea to try to spend at least 15 minutes a day in natural daylight. That's during the summer - and you need longer in winter. PRESENTER: OK, how about negative effects?

CAROL: Well, sunlight is responsible for 95% of skin cancers

although, fortunately, 89% of these cancers are cured. And it's particularly important to protect children from strong sunlight because 80% of sun damage occurs before the age of 10. PRESENTER: And what about people like us, from colder countries ...?

CAROL: Yes, well, the more intense the light, the higher the

risk of skin damage. For light-skinned people the risk of skin cancer doubles every thousand kilometers nearer the equator you go. It's the ultraviolet light that does the damage and before you go swimming or walking, it's worth remembering that ultraviolet can pass through water, shade and even through thin clothing.

PRESENTER: So what should we be doing?

CAROL: Well, the skin has its own protection from about

30% of ultraviolet light. You should use a good sun screen to increase that, but remember that the degree of protection depends on how thinly you spread the cream on your skin. Once your skin is tanned, the tan will protect your skin two to four times more than an untanned skin, but it's a good idea to carry on using a light sunscreen all the same.

PRESENTER: And how long will that tan last?

CAROL: About 30 days, on average.

PRESENTER: So the message is: enjoy the sun but never

underestimate its power, and make sure you take sensible precautions to protect yourself from its harmful effects. Thanks Carol.

#### 4. Typical milestone tests.

#### Typical milestone test 1 semester

#### **Grammar activities**

#### **Test 1. Infinitive Constructions.**

Choose the right option:

Many organizations allowed \_\_\_\_\_\_ new recycling programs in their business processes
 a) to introduce b) introduce c) introduce

- 2) The report on the negative effects of the greenhouse effect made us \_\_\_\_\_ uncomfortable.a) to feel b) feeling c) feel
- 3) Has the secretary come yet? I want to have my papers printed.

a) to have b) have c) having

4) I watched plants \_\_\_\_\_ from seeds.

a) grow b) grow c) to grow

5) Many consumers are nowadays committed to "\_\_\_\_\_ green."

a) go b) going c) to go

#### Test 2. Form a noun from a verb.

(to grow) Interactive simulation of a seed growing into a flowering plant help children aged 5-6 investigate the conditions plants need for \_\_\_\_\_\_.

#### Test 3. Form an adjective from a verb.

(to know) Several well-\_\_\_\_\_ and highly successful companies are proving to be leaders in the fields of environmental sustainability

#### Test 4. Choose the right tense form:

Eco-friendly businesses often \_\_\_\_\_ from favorable public opinion and greater customer loyalty. a) benefit b) are benefiting c) will benefit

#### **Translation activities**

#### Translate the sentences into Russian.

1. Recently more and more attention has been focused on the problem of preserving the environment

2. The present-day situation forces more and more countries to start contributing to this field of research.

3. The link between the spread of some diseases and the quality of water for drinking and washing is absolutely clear.

4. Nobody expects this problem to be solved within such a short period of time.

5. Lead is found in old water pipes and old paints. Occasionally, small children get lead poisoning from eating lead-based paint from the walls of old houses.

6. We know national parks to be abused and subjected to tourism in such a volume and pattern as to degrade and destroy the very natural resources whose preservation is legally required.

7. As a matter of fact, no living organism can be expected to survive at such temperatures.

8. Birds, fish and mammals are often responsible for the distribution of parasites infecting man through water supplies.

9. Developing countries today can also use large scale water chlorination because it is cost-effective.

10. The females of Emperor Penguins care the eggs solely, the males being far away from the colony in the open ocean to get food for the females.

#### Abstracting of texts by specialty Read the text and do the tasks.

Deke Arndt, Climate Monitoring Branch Chief, National Climate Data Center

On any given day or any given month, somebody somewhere – maybe even where you live – experiences colder-than-average temperature, even though the globe as a whole is warmer than average. Pockets of cold on a warming planet. How can both be true? It has been true for hundreds of months. These patterns are complex, but they're not random.

Tracking global temperature starts with measurements in specific places. Long-term temperature records at stations like this establish what is "normal". It's the average temperature. Subtracting this average temperature from the observed temperature leaves a "temperature anomaly".

The data from stations across large areas allow us to map these temperature anomalies around the globe. The red areas on this map were warmer than average during winter – December, January, and February. Blue areas were colder than the long-term averages. Last winter, the western United States was colder than average, but the East was warmer. Intense cold blanketed northeastern Asia while it was warmer than average just to the west. Even though there are a lot of pockets of cold, the overall global temperature was above average. The area with above-average temperature outweighed the area with below-average temperature.

Another interesting pattern is clear in this dataset. Notice that the temperature anomalies over the ocean are much more muted than over land. This is because the ocean warms, and cools, more slowly than land. Notice how much of the ocean is above average, though.

Moving into Spring, this March was below the 20th century average in the United States, but the overall global temperature remained above the long-term average.

In studying regional climate patterns, climatologists are learning about the planet as a whole. Understanding why one region differs from another takes an understanding about interactions among the atmosphere, the ocean, and even human decisions. Sometimes, being climate-smart can be as complex as the climate system itself.

From Asheville, North Carolina, I'm Deke Arndt related

March 2013 Global Temperature Update March: Out Like a Lion

### Exercice 1. Give a title to the article. Give the main idea of the text.

#### Exercice 2. Ask questions to find the main idea of each paragraph.

#### **Exercice 3. Translate the following:**

Tracking global temperature starts with measurements in specific places. Long-term temperature records at stations like this establish what is "normal." It's the average temperature. Subtracting this average temperature from the observed temperature leaves a "temperature anomaly."

#### Exercice 4. Make a summary using the following forms:

The ... subject (matter) ... of this paper is ... The present paper ... goes (inquires) into / focuses on / deals with... The aim of this paper is to find some optimal ways of... This paper aims at... Writing this paper there were two / three goals in mind \_\_\_\_\_\_ The \_\_\_\_\_ chief /general \_\_\_\_\_\_ aim is

paper there were two / three goals in mind... The ... chief /general... aim is...

In this paper,  $\dots$  attempt to clarify the relation of  $\dots$ . To do so,  $\dots$  first present  $\dots$  then attempt to show that...

The structure of this course paper is as follows. The first part reviews / describes / clarifies

/ outlines ... . Part 2 (section 2) dwells on / enlarges upon / shows that / argues that ... .

The final part proposes / summarizes / spells out in detail.

Summing up the results of the conducted analysis the following conclusions can be made:... I want to end this paper ... by repeating / stressing / emphasizing / nothing that ... . The obtained results ... can be directly applied to the process of ... . In conclusion, ... is considered. / It is concluded that.../ Thus, we can make a conclusion (a. conclusion can be made) that... / From the results it is concluded that.... It may be noted (stated) that...

### Exercice 5. Make a brief abstract in Russian (3 sentences, no more than 70 words)

## Typical milestone test 2 semester

### Grammar activities

### **Test 1. Introduce appropriate linking words:**

Actually, for example, in general, finally, on the whole, as a rule, in this case, also, in most cases, in other words, moreover, what is more, so, in particular, in addition, besides, especially, mainly, as well (as), not only... but also, to put it more simply, in fact, perhaps, it's also possible that, let's say:

There is, \_\_\_\_\_, little scientific dogma on cat navigation.

\_\_\_\_\_ migratory animals like birds, turtles and insects have been studied more closely, and \_\_\_\_\_ use magnetic fields, olfactory cues, or \_\_\_\_\_ orientation by the sun.

Scientists say it is \_\_\_\_\_ more common, although still rare, to hear of dogs returning home.

Dr. Bradshaw said, that they have inherited wolves' ability to navigate using magnetic clues.

But \_\_\_\_ dogs get taken on more family trips, and \_\_\_\_ lost dogs are more easily noticed or helped by people along the way.

"\_\_\_\_ Cats navigate well around familiar landscapes, memorizing locations by sight and smell, and \_\_\_\_ easily figuring out shortcuts", Dr. Bradshaw said.

"\_\_\_\_\_ they associate the smell of pine with wind coming from the north, \_\_\_\_\_ they move in a southerly direction," Dr. Bateson said\_\_\_\_.

"It's \_\_\_\_ happened to me," said Jackson Galaxy, a cat behaviorist who hosts "My Cat From Hell" on Animal Planet.

### Test 2. Find and translate the modal verb.

Holly the cat hardly seemed an adventurous wanderer, though her background might have given her a genetic advantage. Her mother was a feral cat, but after all, she spent most of her life as an indoor cat, except for occasionally running outside to chase lizards. This cat, it could be she has the personality of a survivor.

## **Translation activities**

### Translate the sentences into Russian.

The environment is now on the political agenda throughout the world. Increasing concern shown by the electorate about the quality of their environment has encouraged governments and business to prepare for local and international action. The major issues include:

- possible climate change;
- land degradation and the impact of agriculture; air and water quality;
- loss of habitat, particularly wetlands and forests;
- biological diversity;
- waste and problems of its disposal; and
- depletion of the ozone layer.

Wastes – both those produced and those avoided – are a major concern in any consideration of sustainable development.

Energy resources are available to supply the world's expanding needs without environmental detriment. Wastes remain a major consideration whether they are released to the environment or not.

Ethical principles seem increasingly likely to influence energy policy in many countries, which augurs well for nuclear energy.

The competitive position of nuclear energy "is robust from a sustainable development perspective since most health and environmental costs are already internalized."

#### Abstracting of texts by specialty

### Read the text and do the tasks.

Burning fossil fuels produces primarily carbon dioxide as waste, which is inevitably dumped into the atmosphere.

With black coal, approximately one tone of carbon dioxide results from every thousand kilowatt hours generated.

Natural gas contributes about half as much CO2 as coal from actual combustion, and also some (including methane leakage) from its extraction and distribution.

Oil and gas burned in transporting fossil fuels adds to the global total. As yet, there is no satisfactory way to avoid or dispose of the greenhouse gases which result from fossil fuel combustion.

Today uranium is the only fuel supplied for nuclear reactors. However, thorium can also be utilized as a fuel for CANDU reactors or in reactors specially designed for this purpose.

Thorium is reported to be three times as abundant in the earth's crust as uranium, it can be used as a nuclear fuel.

Neutron efficient reactors, such as CANDU, are capable of operating on a thorium fuel cycle, once they are started using a fissile material such as U-235 or Pu-239. Then the thorium (Th-232) atom captures a neutron in the reactor to become fissile uranium (U-233), which continues the reaction.

Some advanced reactor designs are likely to be able to make use of thorium on a substantial scale.

The thorium fuel cycle has some attractive features, though it is not yet in commercial use.

The 2009 IAEA-NEA "Red Book" lists 3.6 million tones of known and estimated resources as reported, but points out that this excludes data from much of the world, and estimates about 6 million tones overall. See also companion paper on thorium. Main references OECD NEA & IAEA, 2010, Uranium 2009:

Resources, Production and Demand WNA 2009 Market Report.

UN Institute for Disarmament Research, Yury Yudin (ed) 2011, Multilateralization of the Nuclear Fuel Cycle – The First Practical Steps.

### Exercise 1. Give a title to the article. Give the main idea of the text.

#### Exercise 2. Ask questions to find the main idea of each paragraph.

#### Exercise 3. Make a summary using the following forms:

The ... subject (matter) ... of this paper is ... The present paper ... goes (inquires) into / focuses on / deals with ... The aim of this paper is to find some optimal ways of ... This paper aims at... Writing this paper there were two / three goals in mind... The... chief/general... aim is... In this paper, ... attempt to clarify the relation of... To do so, ... first present... then attempt to show that... The structure of this course paper is as follows. The first part reviews / describes / clarifies / outlines... Part 2 (section 2) dwells on / enlarges upon / shows that / argues that... The final part proposes / summarizes / spells out in detail... Summing up the results of the conducted analysis the following conclusions can be made:... I want to end this paper... by repeating / stressing / emphasizing / noting that... In conclusion, ... is considered. / It is concluded that... Thus, we can make a conclusion (a conclusion can be made) that... From the results it is concluded that... It may be noted (stated) that...

### Exercise 4. Make a brief abstract in Russian (3 sentences, no more than 70 words)

#### Typical milestone test 3rd semester

## Exercise 1

Fill the gaps:

- 1. The children swam quickly to the \_\_\_\_\_ in the sea.
  - a. Rock
  - b. House
  - c. mountains
  - d. Stone
- 2. He is a real businessman, wealthy, successful, happy, in other words, rather \_\_\_\_\_.
  - a. Prosperous
  - b. picturesque
  - c. Devotion
  - d. Striking
- 3. The clock of the House of the Parliament \_\_\_\_\_ every hour.
  - a. Striking
  - b. Strikes
  - c. hang
  - d. Takes
- 4. It's hard work to learn to speak a foreign language \_\_\_\_\_.
  - a. Quick
  - b. fluently
  - c. Briefly
  - d. In short
- 5. You can easily cross this \_\_\_\_\_. It is not deep and wide.
  - a. Ocean
  - b. Sea
  - c. Stream
  - d. Path
- 6. Everyone knows that the sun \_\_\_\_\_ in the west.
  - a. Sets
  - b. Rise
  - c. rises
  - d. Setting
- 7. There are many people in light clothes walking along the \_\_\_\_\_ of the ocean.
  - a. Shore
  - b. beach
  - c. bank
  - d. side
- 8. Little children like to play in warm sand on the \_\_\_\_\_ of the sea.
  - a. bank
  - b. beach
  - c. pavement
  - d. road
- 9. People can hardly live in the \_\_\_\_\_ because there is no water there.
  - a. Desert
  - b. Forest
  - c. field
  - d. Sea
- 10. If you look at the map of the world, you can see many rivers, forests, seas, lakes, oceans and mountain \_\_\_\_\_ there.

- a. Rows
- b. Ribbons
- c. Chains
- d. crosses

#### Task 2

#### Choose the only correct answer:

#### GLOBAL WARMING

1. Far into \_\_\_\_\_ future, the Earth is getting warmer and warmer \_\_\_\_\_ ice caps melt and sea levels

a. A, that, rises

- b. The, as, rise
- c. –, as, rising
- d. An, if, rise
- 2. That \_\_\_\_\_ the \_\_\_\_\_ scientific data \_\_\_\_\_ global warming.
  - a. Are, last, of
  - b. Is, last, on
  - c. Is, latest, of
  - d. Is, latest, on
- 3. The work of several \_\_\_\_\_ scientists, \_\_\_\_\_ spent three years on the project, consists of \_\_\_\_\_\_ 1,000-plus-page report.
  - a. Hundred, who, of
  - b. Hundreds, who, in
  - c. Hundred, that, of
  - d. Hundreds, who, of
- 4. But \_\_\_\_ bottom line is clear: human-caused climate change \_\_\_\_ continue \_\_\_\_ many centuries.
  - a. A, is, for
  - b. The, will, in
  - c. The, will, for
  - d. –, are, for
- 5. Global temperatures could rise by more \_\_\_\_ 10 degrees Fahrenheit over \_\_\_\_ next century, as much as they've \_\_\_\_ since the last Ice Age 20,000 years ago.
  - a. That, the, rise
  - b. Then, a, risen
  - c. Than, the, rose
  - d. Than, the, risen
- 6. While 10 degrees difference would cause \_\_\_\_ frosty New England morning, much warming \_\_\_\_\_ bring with \_\_\_\_ more thunderstorms, floods and water-born diseases.
  - a. A, could, it
  - b. The, can, him
  - c. –, could, them
  - d. An, would, it
- 7. Skeptics \_\_\_\_\_ already expressed doubts \_\_\_\_\_ the weather \_\_\_\_\_ report.
  - a. Are, about, changes
  - b. Has, of, changing
  - c. Have, about, changes
  - d. Is, about, changes
- 8. Some of them \_\_\_\_, the "scary predictions" \_\_\_\_ based \_\_\_\_ computer models only.

- a. Says, are, on
- b. Say, are, on
- c. Say, is, on
- d. Say, are, of
- 9. Most experts now understand that the "greenhouse effect" <u>the cause</u> climatic change, and that <u>main cause is carbon dioxide and other gases from factories</u>.
  - a. Is, at, it
  - b. Is, of, it's
  - c. Are, of, it
  - d. Is, of, its
- 10. It \_\_\_\_\_ very likely \_\_\_\_\_ this century have higher temperatures and more hot days over nearly all land \_\_\_\_.
  - a. is, that, area
  - b. Will, that, areas
  - c. Is, that, areas
  - d. Does, then, areas
- 11. The 1990s was the \_\_\_\_ period, and 1998 was \_\_\_\_ warmest year since instrument recording started \_\_\_\_ 1861.
  - a. Warm, a, in
  - b. Warmest, the, in
  - c. Warmer, -, in
  - d. Warm, the, in
- 12. Snow cover in the Northern Hemisphere has become \_\_\_\_ by 10 percent since \_\_\_\_ 1960s, and the thickness of Arctic ice has \_\_\_\_ thinner by as much as 40 percent.
  - a. Less, the, become
  - b. Little, a, become
  - c. Least, the, become
  - d. Less, -, become
- 13. But what \_\_\_\_ the solution \_\_\_\_ this problem \_\_\_\_?
  - a. is, of, be
  - b. Can, of, is
  - c. Is, of, -
  - d. Is, in, be
- 14. In Kyoto, Japan, \_\_\_\_ 1997, more \_\_\_\_ 100 countries signed \_\_\_\_ treaty.
  - a. At, that, the
  - b. In, than, a
  - c. In, then, a
  - d. In, that, -
- 15. \_\_\_\_\_ included the general requirement \_\_\_\_\_ industrialized nations should stop greenhouse-gas emission by 5 percent below 1990 level \_\_\_\_\_ 2010.
  - a. He, that, by
  - b. It, what, in
  - c. Its, that, by
  - d. It, that, by
- 16. But nobody <u>how</u> it practice.
  - a. Know, to do, at
  - b. Knows, do, in
  - c. Knows, to do, in
  - d. Knows, doing, in

- 17. \_\_\_\_ any case, people began \_\_\_\_ efforts \_\_\_\_ control climate change.
  - a. In, making, in
  - b. At, make, in
  - c. In, to make, at
  - d. At, making, at
- 18. "Although this problem was created \_\_\_\_\_ people many years ago, consequences are now \_\_\_\_\_\_ clear," says Nancy Kete.
  - a. In, her, quiet
  - b. By, it, quite
  - c. By, it's, quite
  - d. By, its, quite
- 19. She is <u>director</u> the World Resources <u>climate</u>, energy, and pollution program.
  - a. A, of, Institute's
  - b. The, in, Institute's
  - c. –, at, Institute
  - d. A, in, Institute
- 20. \_\_\_\_ responsibility \_\_\_\_ reduce carbon emission lies \_\_\_\_ industrialized countries.
  - a. A, in, with
  - b. The, to, with
  - c. –, to, with
  - d. The, to, at

### Task 3 Perform text translation

#### THE IMPORTANCE OF BEING "GREEN"

The word "ecology" means a natural balance between all living creatures and their environment.

But unfortunately, the humans have destroyed it and the ecological problems have become the most important ones. People all over the world try to solve them to survive. Governments make laws to protect air, water and soil against pollution.

International environmental organizations try their best to help. Greenpeace is the most famous one.

Its members appear in the places where the environment is endangered. They always act fast and bravely. The whole world knows about the Greenpeace actions to stop hunting whales or killing baby seals, to block the way to the ships that try to dump waste. They work hard to crate a nuclear-free world. Some people are active members of such organizations, some support them with money.

But nowadays it's more important to realize that every person should change his/her traditional lifestyle, to become a "green" person to survive. That's why even children are taught ecology at schools. They discuss the ecological problems, study their own environment, try to become more friendly to nature. We can't stop using cars, they are necessary for us. But if we use them less, we will protect the air against the pollution. Thus in many countries people use bicycles more often for shopping or short trips. It's cheaper and keeps the air cleaner. At our homes we should save as much as we can including water, gas, electricity resources.

We should be careful buying washing powders. Some types of them are friendly to our environment, but some are harmful and dangerous.

We should remember that we are part of nature, so we are endangered too. We have little physical activity, watch TV for many hours, work on computers, eat wrong food. We are destroying ourselves.

When people realize the importance of the environmental problems and change their lifestyle, half of work will be done. There is still hope.

Task 4 Perform text summarization:

# CHIMPANZEE GROUPS HAVE UNIQUE CULTURES, BUT PEOPLE COULD BE DESTROYING THEM

Most people know that chimpanzees, some of the closest living relatives of human beings, are extremely intelligent. It's less well-known that different communities of chimpanzees have unique cultures - meaning they exhibit socially learned behavior that get passed from generation to generation.

As researchers learn more of them, they are also discovering more about the diversity of behaviors within chimpanzee groups - activities learned, at least in part socially, and passed from generation to generation. These patterns are referred to as "traditions"—or even animal "culture." In a new study, scientists argue that this diversity of behaviors should be protected, and that they are now under threat from human disturbance.

"What we mean by 'culture' is something you learn socially from your group members that you may not learn if you were born into a different chimpanzee group," Ammie Kalan, a primatologist involved in the study, told The Associated Press.

For example, New Scientist notes there's one chimp community that uses moss like a sponge to soak up and drink water — a behavior not seen in other groups. For example, researchers studying chimpanzee groups in parts of West Africa encountered mysterious piles of stones alongside battered tree trunks. Perhaps the purpose was to mark territory, or proclaim dominance within a group, or start a game, or something else, the biologists surmised.

But not all chimpanzees are stone-throwers. Some groups use stones to crack open tree nuts. Elsewhere in West Africa, sticks were the tools of choice, with young chimps in Guinea learning from their elders to use them to "fish" in lakes for long strands of algae to eat. Or, in Nigeria, to poke termite mounds to gather the insects for food.

"As chimpanzee populations decline and their habitats become fragmented, we can see a stark decline in chimpanzee behavioral diversity," said Kalan, co-author of the sweeping new study published Thursday in the journal Science.

In a study published in the journal Science, researchers looked at 31 behavioral traditions among 144 chimpanzee groups across Africa. They found that in areas with heavy human activity like logging or road building, the animals were less likely to exhibit these kinds of behaviors.

A fragmented landscape makes it harder for learned behaviors to spread, and some human activity may force chimps to live in smaller groups, where less social learning is likely to occur, primatologist and lead study author Hjalmar Kuhl told the Associated Press.

Climate change may also play a role, since it alters chimpanzee habitats and thus affects the animals' behavior. The findings suggest that when it comes to conservation, it's important to consider individual cultures - not just overall species populations.

"Each population, each community, even each generation of chimpanzees is unique," primatologist Cat Hobaiter, who is not one of the study's authors, told The Atlantic. "An event might only have a small impact on the total population of chimpanzees, but it may wipe out an entire community — an entire culture."

And that consideration isn't just limited to chimpanzees. Animals like whales, dolphins and orangutans have also displayed evidence of cultures.

#### 5. Typical intermediate tests.

#### Standard midterm test 1 semester

#### **Grammar activities**

#### **Test 1 Choose the right option:**

1. Amid \_\_\_\_\_ (1 to rise) awareness of the impact businesses can have on the environment, companies of every size and type have begun \_\_\_\_\_\_ (2 to implement) environmental sustainability initiatives.

1) a. rise b. rising c. rising

2) a. implementing b. implement c. to implement

2. Some companies are taking a big-picture approach by \_\_\_\_\_ (1 to examine) every step of their product lifecycle and applying green supply chain management practices across the board.

- 1) a. examine b. examining c. examined
- 2) a. apply b. applying c. applied

3. While improving working conditions and protecting the environment are certainly admirable goals, they haven't also proven to be good business strategies.

1) a. examine b. examining c. examined

2) a. apply b. applying c. applied

4. Most of the products are \_\_\_\_\_ (1 to export) to \_\_\_\_\_ (2 to develop) countries.

1) a. exporting b. exported

2) a. developing b. developed

5. For example, implementing environmentally sustainable practices has the potential to eliminate waste and generate cost savings, \_\_\_\_\_\_ to a stronger bottom line.

1) a. leading b. led

6. All \_\_\_\_\_ machines are in the field of green supply chain management. a) washing b) washed

#### Test 2. Gerund. Choose the right option.

		0 1		
1.	I really appreci	ate thi	s opportunity. I'll do my best.	
	a) giving	b) being given	c) having been given	
2. Our teacher suggests test next week.				
	a) writing	b) being written	c) having been written	
3.	He was clever of	enough	in this delicate situation.	
	a) avoiding, spo	eaking	b) to avoid, to speak	
	c) avoiding, to	speak	d) to avoid, speaking	
4.	I wonder if the	re is any use	the results.	
	a) trying, impro	oving	b) trying to improve	
	c) to try, to imp	prove	d) to try, improve	
5.	She strongly of	jected to our	a joint report.	
	a) making	b) being made	c) having been made	

#### Test 3. Choose the right tense form:

Some companies \_\_\_\_\_ (to take) a big-picture approach by examining every step of their product lifecycle and applying green supply chain management practices across the board.

#### **Translation activities**

#### Translate the sentences into Russian.

1. eBay Eco-Initiatives. One example of a company with an environmental sustainability focus built right into its business plan is eBay.

2. The online site makes it easy for people all over the world to exchange and reuse goods rather than throwing them away, thereby lengthening the lifespan of these products so they don't wind up as trash.

### Abstracting of texts by specialty

### Read the text and do the tasks.

The atmosphere is the layer of gas that surrounds the earth. The composition of the atmosphere changes with the distance from the earth's surface. The layer near the surface - the troposphere - contains the air we breathe, which is 78 percent nitrogen, 21 percent oxygen, 0.03 percent carbon dioxide, and 1 percent inert gases such as argon. water vapor, small particles of dust, The stratosphere contains thin, cold air with less oxygen and no dust or water vapor. The ionosphere contains very thin air and electrically charged particles which reflect electromagnetic waves.

The lower part of the stratosphere contains a band of warm gas called the ozone layer. Ozone absorbs very shortwave ultraviolet radiation - that is, the harmful, burning rays from the sun. These rays kill plants and cause burns, skin cancer, and cataracts in animals and man. The ozone layer protects us from these damaging effects. The man-made chemicals chlorofluorocarbons break up ozone molecules. Chlorofluorocarbons occur in some aerosols (such as deodorants, hair sprays and cleaning fluids), expanded polystyrene (such as fast-food packaging) and the cooling mechanism of refrigerators. Most scientists now accept that CFCs are very bad for the environment. They have already caused a large hole in the ozone layer.

Another environmental problem in the atmosphere is the green-house effect. The sun's energy arrives as shortwave radiation; some of this is reflected away in the clouds and upper atmosphere and some is absorbed into the ground. About 5 percent of the energy are reflected off the earth's surface as long-wave radiation. Certain gases in the atmosphere - especially carbon dioxide, methane and CFCs - reflect this long-wave radiation back to earth. The glass in a greenhouse conserves heat by the same principle, so these gases known as "greenhouse gases". The greenhouse effect is very important. But an increase in the greenhouse effect may lead to global warming, with disastrous consequences.

A rise in the earth's average temperature of only one or two degrees would probably melt large expansions of ice in the Arctic and the Antarctic and raise sea levels. Sea levels throughout the world are already rising by about two millimeters a year. Many heavily populated regions, such as Bangladesh, the Nile delta, the Netherlands and Indonesia, would be permanently flooded. Some islands, such as Maldives in the Pacific, might disappear completely.

#### Exercice 1. Give a title to the article. Give the main idea of the text.

#### Exercice 2. Ask questions to find the main idea of each paragraph.

Exercice 3.Write out the answers to each of the above questions in complete sentences.

1. The atmosphere ...

- a. is the layer of gas which contains thin, cold air with less oxygen and no dust or water vapor;
- b. contains water vapors, small particles of dust, and tiny quantities of other gases;
- c. a composition of gases that surround the earth.
- 2. Which layer of gas is the nearest to the earth?

a. the ionosphere; b. the troposphere; c. the stratosphere;

3. Where is the ozone layer located?

a. in the stratosphere; b. in the troposphere; c. in the ionosphere.

- 4. What destroys the ozone layer?
  - a. shortwave ultraviolet radiation;
  - b. harmful, burning rays from the sun;
  - c. man-made chemicals.
- 5. What is meant by greenhouse effect?
  - a. the conservation of heat with the help of some gases;
  - b. the reflection of the sun's energy in the clouds;
  - c. the absorption of short-wave radiation into the ground.

#### Exercice 4. Write a one paragraph summary using the following forms.

The present paper ... goes (inquires) into / focuses on / deals with... It is reported that ... The text gives valuable information on... Much attention is given to... It is shown that... The first part reviews / describes / clarifies / outlines ... Summing up the following conclusions can be made:...

Exercice 5. Make a brief abstract in Russian (3 sentences, no more than 70 words).

#### Standard midterm test 2nd semester

#### Grammar activities

### Test 1. Translate Passive Forms.

- a. With another three endangered California condors dead from lead poisoning in Arizona, conservation advocates are ramping up their call to phase out the use of lead ammunition.
- b. Seven of the birds have died since December, and three of the deaths are definitively linked with lead poisoning, according to the Center for Biological Diversity.
- c. It's clear that voluntary efforts to reduce lead ammunition use around the Grand Canyon aren't getting the job done.

### Test 2. Find and translate the modal verb.

- a. Three condors may not sound like many, but that's already 5 percent of the entire Arizona-Utah population, which numbers only about 80 birds.
- b. Each year, up to half of the Grand Canyon condors must be given life-saving, emergency blood treatment for lead poisoning.

- c. Given the wide availability lowered cost and high performance of lead-free ammunition, these states should admit it's time to require nontoxic rounds for hunting.
- d. When the cause of death could be determined, more than half were due to poisoning from ingesting lead ammunition fragments left in carcasses of shot game.

#### Test 3. Form an adjective from a verb.

"The \_\_\_\_\_ (to continue) deaths of Grand Canyon condors from lead poisoning is \_\_\_\_\_ (to prevent) if we finally treat toxic lead ammunition as we did lead paint and leaded gasoline," said Jeff Miller, with the Center for Biological Diversity.

#### **Translation activities**

#### Translate the sentences into Russian.

Despite the basic biological, chemical, and physical similarities found in all living things, a diversity of life exists not only among and between species but also within every natural population.

The phenomenon of diversity has had a long history of study because so many of the variations that exist in nature are visible to the eye.

The fact that organisms changed during prehistoric times and that new variations are constantly evolving can be verified by paleontological records.

The total number of animal and plant species is estimated at between 2,000,000 and 4,500,000; authoritative estimates of the number of extinct species range from 15,000,000 up to 16,000,000,000.

We know national parks to be abused and subjected to tourism in such a volume and pattern as to degrade and destroy the very natural resources whose preservation is legally required.

#### Abstracting of texts by specialty

#### Read the text and do the tasks.

The economic environment consists of factors that affect consumer purchasing power and spending patterns. Dominant categories of cars in the United States in the early 2000s were pick-up trucks and sport utility vehicles (SUVs).

America's big three motor companies, GM, Ford, and Chrysler focused heavily on this segment and produced many trucks and SUVs for their consumers. The market for these categories has become so large and popular; they became cash cows for the "Big Three."

Later in the decade though, consumers faced an increase in gas prices, environmental/green-eco agencies raised awareness, and the start of the recession took place, diminishing the demand and consumption of large vehicles. The lasting effects these events brought have changed consumers spending patterns.

With the 2010 North American International Auto Show just wrapping up, the main buzz was all about small cars. Smaller, fuel-efficient cars have been gaining popularity among consumers and many automobile industries have noticed. Paying for a large vehicle and constantly refilling its gas tank is not considered practical anymore. The "Big Three" quickly had to go back to the drawing boards and design smaller cars that not only provided good value and fuel economy, but also appealed to the public.

Ford has been hyping up their new direction of the company, by marketing their new line up of small cars that are appealing in style, yet very fuel efficient. For example, the Fiesta which was originally designed for the European market is finally making its way to the United States; the great success it has had over seas has made Ford realize its possible potential here.

#### Exercise 1. Give a title to the article. Give the main idea of the text.

#### Exercise 2. Ask questions to find the main idea of each paragraph.

#### Exercise 3. Make a summary using the following forms:

The ... subject (matter) ... of this paper is ... The present paper ... goes (inquires) into / focuses on / deals with ... The aim of this paper is to find some optimal ways of ... This paper aims at... Writing this paper there were two / three goals in mind... The ... chief / general ... aim is ... In this paper, ... attempt to clarify the relation of... To do so, ... first present... then attempt to show that... The structure of this course paper is as follows. The first part reviews / describes / clarifies / outlines... Part 2 (section 2) dwells on / enlarges upon / shows that / argues that... The final part proposes / summarizes / spells out in detail... Summing up the results of the conducted analysis the following conclusions can be made:... I want to end this paper... by repeating / stressing / emphasizing / noting that... In conclusion, ... is considered. / It is concluded that... Thus, we can make a conclusion (a conclusion can be made) that... From the results it is concluded that... It may be noted (stated) that...

#### Exercise 4. Make a brief abstract in Russian (3 sentences, no more than 70 words)

#### Standard midterm test 3rd semester

#### Exercise 1

Fill the gaps.

There used to be many animals a century ago. We can't see them now because they are\_\_\_\_\_\_.
 a. ill
 b. extinct
 c. endanger

d. frozen

2. There are a lot of \_\_\_\_\_\_ in the parks and squares of almost all cities and towns and people like to feed them.

a. cocks b. dodoes c. pigeons d. penguins

3. The world of nature is rich. There are a lot of usual and unusual\_\_\_\_\_\_of animals in it.

- a. species
- b. creatures
- c. example
- d. numbers

4. Flies, ants, butterflies, ladybirds (ladybugs), beetles are\_\_\_\_\_, tortoises, snakes and crocodiles are\_\_\_\_\_. a. birds, insects

- b. insects, reptiles
- c. mammals, reptiles
- d. reptiles, insects

5. They were interested in fishes and were very much surprised to find out that whales are\_\_\_\_\_. a. reptiles

- b. fishes
- c. mammals
- d. insects

6. He is seriously ill, there is no hope because people are not able to\_\_\_\_\_\_ this disease.

- a. cure
- b. damage
- c. include
- d. influence

7. We should protect rivers, oceans, seas and lakes, forests, fields and mountains because it

is the\_\_\_\_\_of many animals, the place where they live.

a. environment

b. countryside

c. habitat

d. habit

8. People didn't think much about environment and big plants, factories and cars\_\_\_\_\_atmosphere and water, so it is dangerous to live in cities nowadays.

a. destroy

b. polluted

c. cured d.

ruin

9. Playing with matches may \_\_\_\_\_\_ a great fire. Be careful!

a. have

b. destroy

c. cause

d.makes

10. The pollution of the air may cause the \_\_\_\_\_ of the ozone layer. a. scarcityb. destructionc. endanger d.poison

Task 2

#### Choose the only correct answer.

My little sister isn't afraid of dogs. Neither \_\_\_\_\_\_
 my little
 brother. a. does
 b. is c.
 do d.
 isn't

2. We didn't travel on board the ship last holidays.

Neither\_\_\_\_our friends. a. do

b. are c. did d.

travel

3. We have not got much time left. Neither \_\_\_\_\_ they.

a. has

b. are

c. have

d. got

4. She liked\_\_\_\_of the two presents I gave her.

a. either

b. both

c. all d.

none

5. 'I don't like chocolate ice-cream.'

a. but

b. neither

c. either d. so 6. 'I love playing tennis.' a. nor I do b. neither do I c. so do I d. so I do 7. We all failed the exam because \_\_\_\_\_ of us had studied for it. a. both b. either c. neither d. none 8. Ann \_\_travel a lot but she doesn't go away very often now. a. used b. is used to c. got used d. used to 9. This building is now a furniture shop. It\_\_\_\_\_ be a cinema. a. used b. got used c. used to d. is used to 10. Better Botter\_\_\_\_\_visit Buckingham Palace every year. a. used to b. is used to c. got used

d. used

### **INTERIM CERTIFICATION - TEST.**

#### Structure and requirements for offset.

#### 1 semester/

n writing:

1. Written translation of a scientific text from a foreign language into Russian (2500 p.z.)

(Completion time 90 minutes) (Checking the formation of written translation skills) *Orally:* 

1. Abstracting in a foreign language of a scientific text according to the profile of training (2500-3000 p.z.)

#### 2 semester

In writing:

1. Written translation of a scientific text from a foreign language into Russian (2500 p.z.)

(Completion time 90 minutes) (Checking the formation of written translation skills)

2. Writing a business letter.

#### Orally:

1. Abstracting in a foreign language of a scientific text according to the profile of training (2500-3000 p.z.)

#### 3 semester/

n writing:

1. Written translation of a scientific text from a foreign language into Russian (2500 p.z.) (Completion time 90 minutes) (Checking the formation of written translation skills). *Orally:* 

1. Abstracting in a foreign language of a scientific text according to the profile of training (2500-3000 p.z.)

2. Presentation of a report on the topic of a master's thesis (with a presentation) (time - 10 minutes).

3. Conversation on the topic of master's thesis.

\* See the Criteria for grading answers.

#### Examples of ticket wording for 1-3 semesters.

1 semester

# FEDERAL STATE AUTONOMOUS EDUCATIONAL INSTITUTION OF HIGHER EDUCATION

#### RUSSIAN UNIVERSITY OF FRIENDSHIP OF PEOPLES (RUDN University) INSTITUTE OF ENVIRONMENTAL ENGINEERING Department of Foreign Languages of the Institute of Environmental Engineering

Foreign language in the professional field (master's degree)

Ticket number 1

- 1. Perform a written translation of scientific text 1 from a foreign language into Russian.
- 2. Perform an oral summary of the scientific text 2.

Department head foreign languages

signature

#### 2 semester

#### FEDERAL STATE AUTONOMOUS EDUCATIONAL INSTITUTION HIGHER EDUCATION RUSSIAN UNIVERSITY OF FRIENDSHIP OF PEOPLES (RUDN University) INSTITUTE OF ENVIRONMENTAL ENGINEERING Department of Foreign Languages of the Institute of Environmental Engineering

Foreign language in the professional field (master's degree) Ticket number 1

- 1. Perform a written translation of scientific text 1 from a foreign language into Russian.
- 2. Perform an oral summary of the scientific text 2.
- 3. Write a business letter for a given situation.

Department head foreign languages

N.G. Valeeva

#### 3 semester

FEDERAL STATE AUTONOMOUS EDUCATIONAL INSTITUTION HIGHER EDUCATION RUSSIAN UNIVERSITY OF FRIENDSHIP OF PEOPLES (RUDN University) INSTITUTE OF ENVIRONMENTAL ENGINEERING Department of Foreign Languages of the Institute of Environmental Engineering

> Foreign language in the professional field (master's degree) Ticket number 1

- 1. Perform a written translation of scientific text 1 from a foreign language into Russian.
- 2. Perform an oral summary of the scientific text 2.
- 3. Submit a report on the topic of the master's thesis (with a presentation)
- 4. Answer the question of colleagues on the submitted report, defending and arguing your point of view.

Department head foreign languages

N.G. Valeeva

# Standard materials for tickets for intermediate certification in the discipline "Foreign language in the professional field" for 1st year undergraduates

#### 1. Text for written translation from English into Russian (2500 items).

THE GREAT GREEN WALL INITIATIVE

In Africa, scientists are hard at work restoring land once rich with biodiversity and vegetation. Eleven countries in the Sahel-Sahara region—Djibouti, Eritrea, Ethiopia, Sudan, Chad, Niger, Nigeria, Mali, Burkina Faso, Mauritania, and Senegal—have joined to combat land degradation and restore native plant life to the landscape. In recent years, northern Africa has seen the quality of arable land decline significantly due to climate change and poor land management.

Uniting under the banner of the "Great Green Wall" initiative, national and regional leaders hope to reverse this trend.

The bulk of the work on the ground was originally slated to be concentrated along a stretch of land from Djibouti (in the east) to Dakar, Senegal (in the west) an expanse 15 kilometers wide and 7,775 kilometers long. The project has since expanded to include countries in both northern and western Africa.

Land degradation typically stems from both human-related and natural factors; overfarming,

overgrazing, climate change, and extreme weather are the most common causes.

Beyond affecting land and the natural environment, land degradation poses serious threats to agricultural productivity, food security, and quality of life.

Nowhere is this issue more urgent than in sub-Saharan Africa, where an estimated 500 million people live on land undergoing desertification, the most extreme form of land degradation.

Jean-Marc Sinnassamy is a senior environmental specialist with the Global Environment Facility (GEF). He helps manage a program developed under the Great Green Wall initiative with countries in the Sahel and West Africa.

The GEF has been with the initiative since the beginning, helping to convene country leaders at the headquarters of the United Nations Convention to Combat Desertification in Bonn, Germany, in February 2011.

The World Bank and other organizations focused on global development and the environment provide financial and technical support.

For Sinnassamy, the partnership represents a unique opportunity to work across the region with a solid political base.

"Here, we saw political leaders, heads of state, ministers in different countries wanting to work on common environmental issues and wanting to tackle land degradation issues together," he says. ". . . For us, this is a political blessing. We have to respond to this demand, and we have to capitalize on that."

#### **Integrated Landscape Approach**

Beyond the project's strong political foundation, its carefully crafted approach brings environmental benefits both locally and globally. The initiative uses an "integrated landscape approach" that allows each country to address land degradation, climate change adaptation and mitigation, biodiversity, and forestry within its local context...

https://www.thegef.org/news/great-green-wall

### 3. Text for oral abstract translation from English into Russian (2500-3000 bp).

Air pollution at sea comes from various sources – mainly big urban centres, land transportation and shipping. Italy Cruise ships – massive floating hotels – sail all around the coasts of Europe. But this luxurious fleet doesn't just carry passengers: it also helps to drive science forward.

Jens Hjorth, senior scientist in air pollution and atmospheric chemistry, at the European Commission's Joint Research Center (JRC) explained: "There's quite a high level of air pollution over the Mediterranean. And there's a lack of data about this, we don't know enough. So we need more observations. And this ship is a very good platform for making observations, because it covers a large area, particularly around the coast where we often have air pollution problems."

Measuring air pollution at sea has to be done on board a vessel, but running a dedicated ship would be prohibitively expensive.

So scientists from the JRC asked for free cabin on a commercial cruise ship - and got one.

The scientists come aboard to carry out maintenance but leave before the cruise starts: all the measurements are automatic. A high resolution imagery system for the monitoring of surface floating marine litter has been tested on "Costa Pacifica".

Scientists at the JRC interact with the ship's monitoring station remotely.

Particles have been sampled during campaigns for subsequent chemical analysis.

Pedro Miguel Rocha e Abreu, an air quality researcher at the JRC explained: "With this data acquisition system we can access the data easily, without having to be physically present on the ship, which is hundreds of miles away from here. And that makes our work much simpler."

Jens Hjorth said: "It has a route in the Western Mediterranean. It starts in Savona, then it goes to Barcelona, Palma, Malta, Catania, Naples and then back to Savona. It makes this trip every week. We have been taking these kinds of measurements since 2006, always in the same area, following more or less the same route. This gives us a data set that allows us to look at change, to see how this situation is changing from year to year."

Jens Hjorth explained: "The air is taken in through two tubes on deck. One measures gas and the other measures particles. And then it's analyzed for SO2, for NOX, and for soot. And then we have an instrument for measuring carbon monoxide, and we also measure ozone."

The station takes air samples non-stop, at sea and in port. The data, sent by satellite Internet to the JRC's headquarters in Ispra, is used to feed and check computer models that simulate air pollution.

High levels of ozone and particulate matter cause risks to human health in many parts of the Mediterranean areas. Ozone causes also damage to vegetation. The concentrations of ozone are particularly high over the Mediterranean because its lifetime over the sea is longer than over the continent.

http://www.apice-

project.eu/img\_web/pagine/files/Tessalonicco/Annex03\_29Jun2011\_\_Hjorth\_JRC.pdf

# **3.** Write a business letter requesting information to obtain information about the conditions of employment.

# Standard materials for tickets for intermediate certification in the discipline "Foreign Language in the Professional Sphere" for 2nd year undergraduates

#### 1. Text for written translation from English into Russian (2500

**p.z.**).Integrated Landscape Approach - The Great Green Wall initiative.

While trees and forests are only part of the focus of the Great Green Wall initiative, many in the media have cast the project as solely a tree-planting project and an attempt to halt the southward expansion of the Sahara Desert.

It is much more nuanced than simply planting a belt of trees across the continent of Africa.

Beyond the project's strong political foundation, its carefully crafted approach brings environmental benefits both locally and globally. The initiative uses an "integrated landscape approach" that allows each country to address land degradation, climate change adaptation and mitigation, biodiversity, and forestry within its local context.

"In this case, working to combat land degradation is the best way to address both very local issues and improve the global environment," Sinnassamy, senior environmental specialist with the Global Environment Facility (GEF), says.

"We are working with the land, which is the basis of livelihood in these communities. We are working with people to improve soil quality, which crop improves yield and in turn agricultural production and the overall quality of life in the community. These very local benefits are also a way to generate global benefits for water, land, and nature."

In the end, Sinnassamy hopes the region as a whole will be composed of a "mosaic of landscapes" that increases biodiversity and maintains native flora as part of agricultural land. Each participating country has its own individual goals, which include reducing erosion, diversifying income, increasing crop yield, and improving soil fertility.

In Niger, Mali, and Burkina Faso natural regeneration managed by farmers has yielded great results. "We want to replicate and scale up these achievements across the region", he says. "It's very possible to restore trees to a landscape and to restore agroforestry practices without planting any trees. This is also a sustainable way of regenerating agroforestry and parkland."

A misperception Sinnassamy points to is that the Sahara Desert is not, in fact, expanding.

"We are not fighting the desert," he says. "In the majority of the areas we are working in these 11 countries, the desert is not advancing. The Sahara Desert is a very stable ecosystem. Of course, there are some areas

on the margins - for instance in Senegal, Mauritania, and Nigeria - where there are some sand movements.

But from a geographic perspective, over time the desert has been relatively stable in this

area."https://www.thegef.org/news/great-green-wall

2. Text for oral abstract translation from English into Russian (2500-3000 bp). What is becoming clear is that eco-friendly materials are being used not only in large-scale production, but also in much smaller projects.

It's time for a bit of cooking at a research Institute in Brindisi, Southern Italy.

The recipe is simple: a splashing of natural textiles, a good dose of partially-bio resin and a pinch of bioadditives and enzymes.

Stir well and place your mixture in an oven for a few hours at 60 degrees Celcius.

"It is made out of linen fabrics and natural resins. It is a sustainable, completely organically derived product," says Andrea Ferrari, coordinator at the engineering firm D'Appolonia.

It is, in fact, a new composite structure born out of renewable materials.

And it is these scientists' dream that this new ecomaterial will soon replace plastic composites.

"We are convinced that very soon we will be able to replace fossil-derived materials with exclusively natural materials. We're talking about materials born out of by-products like cotton, linen or hemp, or resins made with sugar cane or other crops which are not aimed at the food market," says Andrea Ferrari.

Before it hits the market, the new ecomaterial's mechanical performances are fully tested and compared with those of carbon and other classic composites.

Tests include fracture toughness, elasticity and plasticity.

"As far as we can see, the natural composite has inferior mechanical properties compared to classic composites. For instance, it is less rigid and shows less mechanical strength than carbon composite," says Andrea Salomi, a materials engineer at Cetma research centre.

"But these mechanical characteristics don't mean that the natural composites will be more difficult to use than carbon composites. It depends on the type of final product that we want to develop with it," he adds. "Research is ongoing to increase the quality of the natural composite. In a year's time, we will have a top quality product. And it shouldn't be that expensive. The natural composites will cost between 20 and 25 percent more than current plastic composites. That would mean a price increase of just 30 of 40 cents per kilo for natural composites," says composite manufacturer Guy Simmonds.

It's hoped this new biocomposite could become a market reality in the next three to four years.

Researchers are not short of ideas. Various concepts are currently under study. The new biocomposite could be used to equip cars, to build construction panels or to assemble furniture or musical instruments.

Taking care of the environment is one aspect of design and manufacture that has become a fact of life for major producers. Creating new materials that are both ecologically sound and fit for purpose is slowly becoming the major focus for companies around the world.

As this focus shifts, we're beginning to imaginative new material created see from a variety of raw materials. So, here we go then: a list of five eco materials that will change the world:

1) Mushrooms can be used in the production of car bumpers, dashboards and side doors.

Since the mycelium product is grown rather than made, complications can develop along the way. Rigorous testing has to be in place to ensure the mycelium grows at an even spread and does not leave air pockets inside the product.

http://ecocycle.org/ecofacts

### 3. Submit a report on the topic of the master's thesis (with a presentation)

# 4. Answer the question of colleagues on the submitted report, defending and arguing your point of view.

The programme is compiled in accordance with the requirements of the ES HE RUDN / FGOS HE.

## **DEVELOPER:**

