Federal state autonomous educational institution
higher education

" RUSSIAN UNIVERSITY OF FRIENDSHIP OF PEOPLES "
(RUDN)

PROGRAM

Discipline title
International regulation in city-planning and environmental protection

Recommended for the educational direction
35.04.09 Landscape architecture,
profile “Management and design of urban green infrastructure”

1. Goals and objectives of the discipline:

The goal is to acquire theoretical and practical skills in the analysis of international interaction in urban planning and environmental protection

Tasks:

- to master the basic concepts and principles of ecology of cities and settlements;
- to study environmental factors in an urbanized environment;
- master the national and regional trends in urban planning and environmental protection;
- to identify the main tendencies and trends of international cooperation in the field of urban planning and environmental protection;
- to predict the development of international cooperation in the field of urban planning and environmental protection;

2. Place of discipline in the structure of EP VO:

The discipline International regulation in city-planning and environmental protection refers to the basic (basic or variable) part of block ____1_____ (block 1, block 2) of the curriculum.

Table 1 shows the previous and subsequent disciplines aimed at the formation of discipline competencies in accordance with the competence matrix of EP HE.

Table 1

Prior and subsequent disciplines aimed at the formation of competencies

№	Code and name of competence	Prior disciplines	Subsequent disciplines (groups of disciplines)
Common cultural competences			
1.	(OK-1,2,3)	Economy of city-services _	-
General Professional Competences			
1.	(OПK-1,2,3)	Economy of city-services	-

Professional competencies			
1.	(ПК-10,18)	Economy of city-services	-

3. **Requirements for the results of mastering the discipline:**
   The process of studying the discipline is aimed at the formation of the following competencies:

Universal competences:

- Able to search, critical analysis problem situations based on a systematic approach, strategize (UC-1);
- Able to organize and direct work teams, developing a team strategy for achieving the set goal (UC-3).
- Able to apply modern communication technologies in the state language of the Russian Federation and foreign language (s) for academic and professional interaction (UC-4).
- Able to analyze and take into account diversity cultures in the process of intercultural interaction (UC-5).
- Able to identify and implement priorities own activities and ways to improve it self-assessment (UC-6).

General professional competencies (GPC):

- Able to analyze modern problems of science and production, to solve complex (non-standard) tasks in professional activity; (GPC-1);
- Able to analyze modern problems of science and production, to solve complex (non-standard) tasks in professional activity; (GPC-2);
- Able to develop and implement new effective technologies in professional activities; (GPC-3);
- •Capable of conducting scientific research, analyze the results and prepare reporting documentation; (GPC-4);
- Able to carry out technical and economic justification of projects in professional activities; (GPC-5);
- Able to manage teams and organize production processes. (GPC-6);

professional competencies (PC):

• the ability to develop work plans and programs for scientific research in the field of landscape architecture, the ability to organize the collection, processing, analysis and systematization of scientific and technical information on the research topic, the choice of methods and means of solving problems (PC-17):
• readiness to develop (based on existing standards) methodological and regulatory documents for the design of landscape architecture objects (PC-24):

As a result of studying the discipline, the student must:
Know:
- methods of planning and conducting research, collecting and interpreting the data obtained and presenting research results;
- problems and trends in the development of science and technology
- the main theses of the national and regional policy in the field of urban planning and environmental protection;
- basic principles of international cooperation in the field of urban planning and environmental protection;
- the main international organizations implementing the policy of international monitoring of urban planning and environmental protection.

Be able to:
- it is logical to formulate, state and reasonably defend their own vision of the problems under consideration;
- plan and conduct research, systematize and interpret the data obtained and present the results of the research;
Own:
- methods of scientific knowledge;
- methods of discussion, polemics, dialogue;
-the methods of forecasting and modeling;
- methods of presenting research results.

4. Discipline volume and types of educational activities
General labour-intensiveness of the discipline amounts to 6 ETCS

Educational activity	Total hours	Semesters			
Audience hours (in total)	60			3	4

Including:	-	-	-	-	-
Lectures	28			2	2
Laboratory work (LW)					
Seminars (S)	32			2	2
Individual work (in total)					
Including:	48			2	2
Course project (work)	216			2	2
	6				

5. Content of the discipline

5.1. Contents of discipline sections

№	Section name	Section content
1.	Introduction to the course. Basic terms: city-planning, urbanizations, urban ecosystems, environmental protection History and actuality of the problem	City-planning and environmental protection as global and national trends. Connections of environmental issues with other areas in the development of cities Modern and ancient cities. Urbanization as a processes of city expansion and urban development Nature urbanization as transformation of natural landscapes into urban infrastructure Functional and formal approaches to define the term «city»
2.	Participation of international organizations in city-planning and environmental protection. International legal framework	Main conventions, protocols, documents, agreements. International organizations in city-planning and environmental protection: possible projects to increase the value of international organizations.
3.	Structure of regulation of city-planning (national, regional, municipal) in Russia	Current realities and trends in the development of socio-economic processes of urbanization; Opportunities, resources and limitations of urban development proper as a form of technical support for urbanization processes; Problems and perspectives of housing and communal

		services and the construction complex, directly related to urban development in the processes of horizontal technological cooperation.
4.	City-planning in EU: goals, problems and principles of policy	Urban development; Urban dimension of cohesion policy; What is integrated sustainable urban development?; Objectives for 2014-2020; The Urban Agenda for the EU; Regional Policy
5.	City-planning in EU: goals, problems and principles of policy	Wildlife; Deforestation and Logging; Energy; Nuclear energy; Pollution; Water pollution; Air pollution; Other forms of pollution; Soil erosion; State initiatives on increasing policy.
6.	Environmental protection in EU: goals, problems and principles of policy	Environmental law; Green policy: Safeguarding the health and wellbeing of people living in the EU; Global challenges;
7.	International cooperation of Russia and EU in city-planning and environmental protection	Forms of international cooperation in the field of city-planning and environmental protection are: - international organizations for the protection of nature; - international treaties, agreements, conventions; - State initiatives on international cooperation.
8.	Global risks in city-planning and environmental protection.	Disaster risk reduction. Possible ways to avoid the risks.

5.2. Разделы дисциплин и виды занятий

№	Name of the discipline section	Lect.	Pract.	Lab.	Sem.	Ind. work	Tot.

1.	Introduction to the course. Basic terms: city-planning, urbanizations, urban ecosystems, environmental protection History and actuality of the problem	4	4			6	14
2.	Participation of international organizations in city-planning and environmental protection. International legal framework	2	4			5	11
3.	Structure of regulation of city-planning (national, regional, municipal) in Russia	4	4			6	14
4.	City-planning in EU: goals, problems and principles of policy	4	4			6	14
5.	Environmental protection in Russia: goals, problems and principles of policy	4	4			9	17
6.	Environmental protection in EU: goals, problems and principles of policy	4	4			6	14
7.	International cooperation of Russia and EU in city-planning and environmental protection	2	4			6	12
8.	Global risks in city-planning and environmental protection.	2	4			6	12

7. Laboratory work

№	Name of the discipline section	Name of the laboratory work	Hours
1.	Introduction to the course. Basic terms: city-planning, urbanizations, urban ecosystems,	– Basic terms. – History and actuality of the problem.	2 2

	environmental protection		
2.	Participation of international organizations in city-planning and environmental protection. International legal framework	– Main conventions, protocols, documents, agreements. – Possible projects to increase the value of international organizations	2 2
3.	Structure of regulation of city-planning (national, regional, municipal) in Russia	– Current realities and trends in the development of socio-economic processes of urbanization. – Problems and perspectives.	2 2
4.	City-planning in EU: goals, problems and principles of policy	– Urban dimension of cohesion policy. – Urban development – The Urban Agenda for the EU.	1 2 1
5.	Environmental protection in Russia: goals, problems and principles of policy	– Energy – Pollution. – Soil erosion. – Wildlife.	1 1 1 1
6.	Environmental protection in EU: goals, problems and principles of policy	– Environmental law. – Safeguarding the health and wellbeing of people living in the EU.	2 2

7.	International cooperation of Russia and EU in city-planning and environmental protection	– Forms of international cooperation in the field of city-planning and environmental protection.	4
8.	Global risks in city-planning and environmental protection.	– Disaster risk reduction. – International terrorism.	2 2

8. Practical classes (seminars) - not provided.

8. Material-technical support of the discipline:

For conducting lecture-type classes, laboratory classes, group and individual consultations, monitoring and interim attestation, course design (coursework), the practice requires a classroom equipped with:

- standard equipment (educational furniture for students, teacher's workplace, blackboard);
- computers, connected to the information and telecommunication network "Internet", access to the electronic library UNIBTS (NB) RUDN (lib.rudn.ru), software ARCHICAD, AutoCAD, SketchUp;
- multimedia installation (PC, screen, projector);
- drawing boards, mock-up table, pencils, rulers, rapidographs.

б) базы данных, информационно-справочные и поисковые системы:

Телекоммуникационная учебно-информационная система (ТУИС): http://esystem.pfur.ru/

http://quakes.globalincidentmap.com/,

http://www.globalincidentmap.com/,

http://earthquake.usgs.gov/earthquakes/recenteqsww/Quakes/quakes_all.php,

http://www.tesis.lebedev.ru/forecast_activity.html

Электронно-библиотечная система РУДН – ЭБС РУДН: http://lib.rudn.ru:8080/MegaPro/Web

Учебный портал РУДН (http://web-local.rudn.ru);

Университетская библиотека онлайн: http://www.biblioclub.ru

Национальный цифровой ресурс "РУКОНТ": http://rucont.ru

IQlib: http://www.iqlib.ru

Science Direct: http://www.sciencedirect.com
EBSCO: http://search.ebscohost.com
Sage Publications: http://online.sagepub.com
Springer/Kluwer: http://www.springerlink.com
Tailor & Francis: http://www.informaworld.com
Web of Science: http://www.isiknowledge. com
Университетская информационная система РОССИЯ: http://www.cir.ru/index.jsp
Учебный портал РУДН: http://web-local.rudn.ru/
Консультант студента http://www.studmedlib.ru

10. Educational and methodological support of the discipline:

a) main literature:

Kurbatova A.S., Bashkin V.N., Kasimov N.S. «Ecology of a city». – M.: 2004 – 624 p (in Russian).
Denisov V.V.., Kurbatova A.S., Denisova I.A.., Bondarenko V.L., Gracheva V.A., Gutenev V.V., Nagnibeda B.A. «Ecology of a city». M.: Rostov on Don: 2008-832 p.(in Russia).
Alberti M. Advances in city-planning: Integrating Humans and Ecological Processes in Urban Ecosystems Springer; 2008 366 p.
R.T.T. Forman. Economy of city: Science of Cities Cambridge University Press 2014. 474 p.
J. Niemela,J. H. Breuste, G.Guntenspergen. Economy of city: Patterns, Processes, and Applications. Oxford University Press; Reprint edition. 2012. 392 p.

б) additional literature:

1). Bandaranayake W., Qian Y. L., Parton W. J., Ojima D. S. and Follett R. F., 2003. Estimation of Soil Organic Carbon Changes in Turfgrass Systems Using the CENTURY Model. Agron. J. 95, 558–563.
2). Dolgikh, A.V., Aleksandrovskii, A.L., 2010. Soils and cultural layers in velikii Novgorod. Eurasian Soil Science, 43, 477–48.
3). Gerasimova, M.I., Stroganova, M.N., Mozharova, N.V., Prokofieva, T.V., 2003. Urban Soils. Oykumena, Smolensk.(in Russian)
4). Golubiewski, N.E., 2006. Urbanization Increases Grassland Carbon Pools: Effects of Landscaping in Colorado's Front Range. Ecological Applications 16, 555-571.
5). Ilina, I.N. (Eds.), 2000. Environmental atlas of the Moscow city. ABF. Moscow (in Russian)

6). Jo, H.K., McPherson E.G., 1995. Carbon Storage and Flux in Urban Residential Greenspace. Journal of Environmental Management 45, 109–133.
7). Kaye, J.P., McCulley, R.L., Burkez, I.C., 2005. Carbon fluxes, nitrogen cycling, and soil microbial communities in adjacent urban, native and agricultural ecosystems. Global Change Biology 11, 575-587.
8). Lorenz, K., Lal, R., 2009. Biogeochemical C and N cycles in urban soils. Environment International 35, 1–8.
10). Pickett, S.T.A., Cadenasso, M.L., Grove, J.M., Boone, C.G., Groffman, P.M., Irwin, E., Kaushal, S.S., Marshall, V., McGrath, B.P., Nilon, C.H., Pouyat, R.V., Szlavecz, K., Troy, A., Warren, P., 2011. Urban ecological systems: scientific foundations and a decade of progress. Journal of Environmental Management 92, 331–362
11). Prokofieva, T.V., Stroganova, M.N., 2004. Soils of Moscow city (soils in urban environment, their specifics and environmental significance). Moscow Biological. GEOS, Moscow.
12). Scalenghe, R., Marsan, F.A. The anthropogenic sealing of soil in urban areas, 2009. Landscape and urban planning 90, 1-10. .
13). Vasenev, V.I., Ananyeva, N.D., Makarov, O.A., 2012. Specific features of the ecological functioning of urban soils in Moscow and Moscow oblast. Eurasian Soil Science 45, 194-205.
14). Vasenev, V.I., Stoorvogel, J.J., Vasenev I.I., 2013b. Urban soil organic carbon and its spatial heterogeneity in comparison with natural and agricultural areas in the Moscow region. Catena. 107.96-102.
15). Vrscaj, B., Poggio, L., Marsan, F., 2008. A method for soil environmental quality evaluation for management and planning in urban areas. Landscape and Urban Planning 88, 81-94

11. Methodical instructions for students on mastering the discipline (module)

The student is required to attend classes, complete the assignments of the discipline teacher, familiarize himself with the recommended literature, etc. During the certification of the student, the quality of work in the classroom, the level of preparation for independent activity in the chosen field, the quality of the assignments of the discipline teacher, the ability to independently study the educational material are assessed.

During practical classes and lectures in classrooms, the relevant topics are analyzed using multimedia technology (computer, projector).

Independent work outside the classroom can take place both in the classrooms of the department and in the computer class, where students can study material on the

presentations prepared by the teachers of the department, as well as on computer tests.
Presentations on the topics of the classes can be recorded on a CD or a flash card for self-study of students on a home computer.
Textbooks in electronic form on a number of topics studied are posted on the pages of the department and employees of the Department of Landscape Design and Sustainable Ecosystems of the ATI RUDN University, on the pages of disciplines in TUIS, on the RUDN University Study Portal, as well as on the local resources of the RUDN University electronic library system.
As one of the forms of independent work, preparation of abstracts for various sections of the course is provided.
Extracurricular independent work includes:
study of material from a textbook, teaching aids on paper and electronic media; preparation of an abstract message on a selected topic; preparation for the performance of tests and test tasks.

12. Fund of assessment tools for intermediate certification of students by discipline (module) - Appendix 1.

The program was drawn up in accordance with the requirements of the OS VO RUDN / FGOS.

Developers:
Ph.D.
Associate Professor _____ V.I. Vasenev

Assistant _____ V.V. Plyushikov

Program manager

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Department Director
Landscape design and
Sustainable Ecosystems _____ E.A. Dovletyarova

Attachment 1

EVALUATION FUND
ACADEMIC DISCIPLINE
International regulation in city-planning and environmental protection
Recommended for referral
04/35/09 "Landscape architecture"

Qualification (degree) of the graduate
Master in Landscape Architecture

Passport of the fund of assessment tools on the discipline International regulation in city-planning and environmental protection
Specialty: 35.04.09 Landscape architecture
1 семестр

Controlled competence code or part thereof	Controlled discipline section	Controlled discipline theme	Name of the appraisal tool						Intermediate certification	Points Topics	Section points
			Current control								
			Colloquium	Test	КР	ДЗ	Project	Final CD			
ОК-3, ОК-5, ПК-10, ПК-18	Introduction to the course.	Basic terms: city-planning, urbanizations, urban ecosystems, environmental protection	**5**			**7**				**12**	**12**
	International organizations in city-planning and environmental protection.	Possible projects to increase the value of international organizations.				**10**				**50**	**50**
		Main conventions, protocols, documents, agreements.				**10**		**15**			
		Current realities and trends in the				**10**			**10**		

		development of socio-economic processes of urbanization.									
		The Urban Agenda for the EU.				**5**					
		Environmental law.	**5**								
	Global risks in city-planning and environmental protection.	Disaster risk reduction.	**10**			**13**				**38**	**38**
		TOTAL							**offset**	**87**	**100**

Correspondence of assessment systems (previously used estimates of final academic performance, ECTS scores and point-rating system (BRS) of current performance assessments).

BRS points	**Traditional RF ratings**	**Ratings ECTS**
95 - 100	5	A
86 - 94		B
69 - 85	4	C
61 - 68	3	D
51 - 60		E
31 - 50	2	Fx
0 - 30		F
51-100	Test	Passed

Explanation of the rating table:

Description of ECTS ratings

A	**"Excellent"** - the theoretical content of the course has been fully mastered , without gaps, the necessary practical skills of working with the mastered material have been formed, all the training tasks provided for by the training program have been fulfilled , the quality of their implementation is estimated by the number of points close to the maximum **.**
B	**"Very good"** - the theoretical content of the course has been fully mastered , without gaps, the necessary practical skills of working with the mastered material are mostly formed, all the training tasks provided for by the training program are completed, the quality of performance of most of them is assessed by the number of points close to the maximum .
C	**"Good"** - the theoretical content of the course is mastered completely , without gaps,some practical skills of working with mastered material are not sufficiently developed , all the training tasks provided by the training program are completed , the quality of performance of none of them is assessed by the minimum number of points, some types of tasks are completed with errors **.**
D	**"Satisfactory"** - the theoretical content of the course is partially mastered, but the gaps are not significant, the necessary practical skills of working with the material mastered are mostly formed, most of the training tasks provided by the training program are completed, some of the tasks performed may contain mistakes.

E	**"Mediocre"** - the theoretical content of the course is partially mastered, some practical skills are not formed, many of the training tasks provided by the training program are not met, or the quality of performance of some of them is estimated by the number of points close to the minimum.
Fx	**"Conditionally unsatisfactory"** - the theoretical content of the course is partially mastered , the necessary practical skills are not formed , most of the training tasks provided by the training program are not met , or the quality of their implementation is assessed by the number of points close to the minimum ; With additional independent work on the course material, it is possible to improve the quality of the performance of educational tasks.
F	**"Certainly unsatisfactory"** - the theoretical content of the course is not mastered, the necessary practical skills of work are not formed, all the completed training tasks contain blunders, additional independent work on the course material will not lead to any significant improvement in the quality of the training tasks.

Positive evaluations, the preparation of which the rate is counted as the learner traversed are estimates A, B, C, D, and E.

FX rated the student on the educational practice of an educational program, after consultation with the appropriate teacher, is obliged to successfully fulfill the required minimum amount of educational work provided for by the program of study, in accordance with the terms established by the educational part, and present the results of this work to this teacher. If the quality of work is found to be satisfactory, then the final assessment of FX is increased to E and the student is allowed to further training.

In the event that the quality of the educational work remains unsatisfactory, the final grade drops to F and the student is submitted for expulsion. In the case of an assessment of F or FX, the student is presented for expulsion regardless of whether he has any other debts in other disciplines.

The program is compiled in accordance with the requirements of OS VO RUDNF / FROS VO.

Questions for the colloquium
by discipline: International regulation in city-planning and environmental protection

1. City-planning: history and actuality of the problem.

2. Environmental protection: history and actuality of the problem.
3. International organizations in city-planning.
4. International organizations in environmental protection.
5. Current realities and trends in the development of socio-economic processes of urbanization.

Essay Topics
by discipline:: International regulation in city-planning and environmental protection

1. Russian State policy in city-planning.
2. Russian State policy in environmental protection
3. The Urban Agenda for the EU.
4. EU policy in city-planning
5. EU policy in environmental protection
6. Disaster risk reduction.
7. International terrorism.
8. International organization in regulation of city-planning and environmental issues