Ecological faculty

WORKING PRCTICUM PROGRAM

Training type: TEACHING PRACTICUM

Direction: <u>05.06.01 "Earth Sciences"</u>

Profile: Ecology: Modern environmental studies

Moscow 2017

1. Teaching practicum tasks and objectives

1. The objectives of the teaching practicun of a graduate student are:
- The acquisition by graduate students of experience in the implementation of the educational process in educational institutions of secondary and higher vocational education;
- Mastering the necessary methods of training and education in the field of education.
- Design of individual components of the educational process;
- Testing of various systems for diagnosing the quality of education;
- Introduction to the social environment of an educational institution in order to acquire social and personal competencies necessary for work in the field of education.
- Formation and consolidation of pedagogical activity skills, application of acquired knowledge and skills in an independent professional activity supervised by a supervisor.

2. Tasks of scientific and teaching practicum

- The objectives of teaching practicum are:

- Acquisition of skills of teaching and educational work in higher school;

- deepening and consolidation of theoretical knowledge in the disciplines of the professional cycle in the implementation of scientific and educational activities;

- acquisition of experience in teaching in higher education;

- formation of professional communication skills with the audience in the process of conducting classes;

- formation of graduate students a holistic view of the pedagogical activity, pedagogical systems and the structure of higher education;

- introduction of graduate students to real problems solved in the educational process of the institution of higher professional education;

- the study of methods, techniques, technologies of pedagogical activity in higher education;

- acquisition of skills for the preparation of reference, auxiliary, control training materials, presentations and their use for conducting classes;

- the study of modern technical and information tools that increase the effectiveness of training procedures, and their application in seminars and practical classes.

2. Place of practicum in the structure of the EP

Teaching practicum in the system of higher qualifications training is a component of vocational training for scientific and educational activities in higher education and is a practical activity

of graduate students in the implementation of the educational process in higher education: teaching special disciplines, the organization of student learning activities , scientific and methodological work on the subject. Teaching practicum is aimed at obtaining the skills and abilities of practical teaching activity.

Teaching practicum for students in basic educational programs (profiles) of postgraduate studies in the direction of "Earth Sciences" is the part of the educational component provided by the curriculum.

For successful mastering of the teaching practicum, a graduate student should have the following input knowledge and skills:

To Know:

1) the scientific basis of the subject being taught;

2) the theoretical foundations of the organization of pedagogical activity in educational institutions

3) the essence and structure of the educational process;

4) pedagogical research methodology;

5) mechanisms for introducing modern achievements of science and high-tech technologies in the educational process;

6) the theory and technology of training and education of the student,

7) technology, algorithm and structural components of the creation of working curricula for elective courses,

8) how the teacher interacts with various subjects of the pedagogical process,

9) methods of professional self-knowledge and self-development.

Be able to:

1) systematically analyze and select professional competencies,

2) to take into account in the pedagogical interaction various features of students,

3) to design the educational process using modern technologies, corresponding to the general and specific laws and features of personality development,

4) to design elective courses taking into account the latest achievements of science,

5) to carry out a creative approach to the use of theoretical knowledge in practical activities, the implementation of all tasks stipulated by the program of practice

6) to use in the educational process a variety of resources, including the potential of other academic subjects.

7) to organize extracurricular activities of the student,

8) use theoretical knowledge to generate new ideas in the field of education.

Own:

1) be familiar with professional information sources (journals, websites, educational portals, etc.),

2) various means of communication in professional pedagogical activity,

3) methods of project and innovation activities in education,

4) ways to improve professional knowledge and skills by using the capabilities of the information environment of an educational institution,

5) technologies of acquisition, use and updating of humanitarian, economic, natural science and social knowledge,

6) skills of reflection, self-assessment and self-control,

7) various ways of verbal and non-verbal communication,

8) the basic skills of processing and analyzing information

9) software skills,

3. Ways of teaching practicum providing

- stationary.\

4. The period of practicum and types of educational work

Table 2 – Practicum volume and types of work

Types of educational work		Hours	Semester
			3
Contact work with the teacher, including control		26	26
Other types of work, including practicum diary and report		190	622
Type of certification test			Graded test
Total volume	Academic hours	648	648
	Credit untis	18	18

5. Place of teaching practicum

Teaching practicum is conducted on the basis of the faculty, in the structural subdivisions of RUDN. A stable base is the department that implements the profile of graduate school.
It is carried out on the 2nd year of study without discontinuing theoretical training.

6. The list of planned results of internship, correlated with the planned results of the development of the educational program

As a result of this practical training, the student should acquire the following practical skills, abilities, universal and general professional competencies:

The ability to independently carry out research activities in the relevant professional field using modern research methods and information and communication technologies Readiness for teaching on the main educational programs of higher education	(GPC-1); (GPC-2).
- Willingness to participate in the work of Russian and international research teams in solving scientific and educational problems BC 3	BC-3
Be able to organize and manage research, research and production, expert-analytical work and pedagogical activities using advanced knowledge in the field of training	PC-4

7. Structure and content of teaching practicum.

1 stage. preparatory):

- a course of orientation lectures is held, in which graduate students are introduced to the goals, objectives and content, main methods, laws, and history of the development of pedagogical science. In addition, graduate students receive advice on the design documentation. An individual task for the practice is prepared with the head of the practice (supervisor).

2 stage (main): student should do:

- acquaintance with Federal State Educational Standards of Higher Professional Education and a working curriculum on one of the main educational programs;

- to master the organizational forms and methods of teaching in a higher educational institution on the example of the department activities;

- to study modern educational technologies of higher education;

- to gain practical skills of educational and methodical work in higher education, preparation of educational material on the required topics for lectures, practical exercises, organization skills and conducting classes using modern learning technologies;

- to study the teaching materials and software for the recommended disciplines of the curriculum;

- to take direct part in the educational process by completing the pedagogical load provided for by the individual work plan.

In the process of training a student should:

- conduct practical (seminars) or lab classes and their analysis, attend classes of fellow graduate students and lectures of leading teachers of the department;

- organize educational activities with students, accumulates scientific data necessary for dissertation work, and also can participate in scientific conferences and attend meetings of the relevant department.

At the third (final) stage, a summary of the practice is provided. Graduate students summarize their pedagogical experience in reports. Teachers analyze the activities of graduate students, they note the difficulties they have encountered and the most successful solutions to the tasks set during the course of the classes. The overall assessment for the practice consists of assessments for conducting classes, taking into account the attitude of each graduate student to the pedagogical activity as a whole, participation in the analysis of classes and registration of documentation.

For students from among persons with disabilities and / or belonging to the category of "disabled", if necessary, the head of the practice develops individual tasks, a plan and procedure for passing the practice taking into account the features of their psychophysical development, individual capabilities health education program adapted for these students (if available) and in accordance with individual rehabilitation programs for people with disabilities.

8. Educational, research and production technologies used in practice

In the process the following educational technologies are used:

- the contact work of the student with the teacher, consisting in obtaining an individual task, passing a safety briefing, receiving advice on the practice, filling out current and reporting documentation, and protecting the practice report;

- other forms of educational work (educational activities), which include the student's main activity in the implementation of sections of practice in accordance with the individual task, recommended methods and sources of literature, aimed at the development of certain professional skills or professional experience, and also on completing the current and reporting documentation, and preparing for the defense of the report on the passage of the practice.

In the process of training the following research and research and production technologies are used:

1. Traditional educational technologies (lectures, practical exercises, including in an interactive form);

2. multimedia technology;

3. technology using simulation tools and simulation;

4. GIS technology (if necessary - in accordance with the specifics of the teaching discipline).

5. the use of various electronic library and reference and legal systems by students, etc.

9. Educational and methodological support of educational practice

The independent work of a graduate student under the guidance of a teacher provides for the preparation for the holding of seminars or practical exercises.

Independent work of a graduate student includes planning of the educational process, the development of teaching and learning, test and measurement materials.

During training, a graduate student must:

1) to study with strict compliance with the rules of labor protection and safety techniques;

2) complete the scope of work provided by the program of practice;

3) be responsible for the work performed and its results;

4) to submit an internship report in a timely manner.

At the end of the teaching practicum the graduate student:

- reports at the meeting of the profile department.
- A graduate student, whose work is recognized as unsatisfactory, is removed from teaching practice.
- By decision of the head of the department, a postgraduate student is assigned other terms for internship.
- Based on the results of the report, a corresponding entry is made in the individual plan of the graduate student in the section "Feedback on teaching training".

10. Material and technical support of teaching training

For the training, specially equipped classrooms and a computer class with workstations providing Internet access, as well as multimedia equipment are needed.

The implementation of the training program should be provided by each graduate student's access to information resources - the department library, the library of the RUDN University and the Internet resources.

To use ICT in the educational process, you must have software that allows you to search for information on the Internet, systematizing, analyzing and presenting information, exporting information to digital media.

Domestic premises must comply with applicable sanitary and fire prevention regulations, as well as safety requirements.

11. Forms of intermediate certification (according to the results of teaching practicum)

Following the training, the graduate student submits a detailed written report.

The report should include information:

- about the work done;

-developed independently plans for practical (seminar) classes, self-assessment of one of the classes conducted by the intern;

The results of each type of training are determined by conducting an intermediate certification with scoring "excellent", "good", "satisfactory", "unsatisfactory" and in the ECTS system (A,

B, C, E). The basis for their exposure is the ball-rating system adopted by the University. Students who have completed practical work in other educational organizations may be credited with the practice after the submission of the relevant training report.

A student who has not completed the training program without a valid reason, has received a negative review of work or an unsatisfactory assessment while defending a report, by decision of the dean's office, in consultation with the relevant department, may be sent to practice again in his free time responsibilities for the fair development of the educational program and the implementation of the curriculum.

Students who have not passed the training of any type for a valid reason, hold it on an individual plan.

12. *Informational support of teaching training*

During the teaching training, graduate students use the main and additional literature recommended by the supervisor to study a specific academic discipline and reflected in the program of the course taught. In addition, the head of practice may recommend to a graduate student to get acquainted with additional materials of a methodological nature.

Main literature

1. Michaela Sepešiová How to Teach Effectively–Lectures &Seminars Electronic resourse https://www.pulib.sk/web/kniznica/elpub/dokument/Strakova2/subor/Sepesiova.pdf

2. Nahid Shirani Bidabadi, Ahmmadreza Nasr Isfahani, Amir Rouhollahi, Roya Khalili Effective Teaching Methods in Higher Education: Requirements and Barriers J Adv Med Educ Prof. 2016 Oct; 4(4): 170–178. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5065908/

3. Helen Patrick, Lynley H. Anderman, Paige S. Bruening, Lisa C. Duffin *The Role of Educational Psychology in Teacher Education: Three Challenges for Educational Psychologists*. Available from: https://www.researchgate.net/publication/233367357_The_Role_of_Educational_Psychology_in_Teacher_Education_Three_Challenges_for_Educational_Psychologists [accessed May 13 2019].

Additional literature

1. Organizing an EffectiveLecture: Elective Seminar https://students.case.edu/academic/workshops/gradta/documents/doc/efflecture.pdf

2. Lecturing Guidelines https://teachingcommons.stanford.edu/resources/teaching-resources/teaching-strategies/checklist-effective-lecturing/lecturing-guidelines

3. Davie Davis Making Lectures More Engaging https://www.ryerson.ca/content/dam/lt/resources/handouts/EngagingLectures.pdf

4. 7 ways to engage students in lectures. King's Learning Institute https://www.kcl.ac.uk/study/learningteaching/learning-and-teaching-support/quickguides/kcl-qg/dl/7ways-engage-students-lectures.pdf

Resources information and telecommunications network "Internet":

1. EBS PFUR and third-party EBS, to which university students have access on the basis of concluded contracts:

o Electronic library system RUDN - ELS RUDN http://lib.rudn.ru/MegaPro/Web

o University Library Online http://www.biblioclub.ru

o ELS Yurayt http://www.biblio-online.ru

o EBS "Student Consultant" www.studentlibrary.ru

o EBS "Lan" http://e.lanbook.com/

2. Databases and search engines:

- electronic fund of legal and regulatory and technical documentation http://docs.cntd.ru/ Yandex search engine https://www.yandex.ru/

- Google search engine https://www.google.com/

- reference database SCOPUS http://www.elsevierscience.ru/products/scopus/

Software: Specialized software for practicing and forming reporting documentation for students depends on the specific discipline.

13. Fund of evaluation tools for the certification of students in practice

The fund, formed to conduct ongoing performance monitoring and intermediate certification of students in practice for obtaining primary professional skills includes:

- a list of competencies generated in the process of training;

- description of indicators and criteria for assessing competencies, description of assessment scales;

- materials necessary for the assessment of knowledge, skills, abilities and (or) experience, characterizing the level of formation of competencies;

- methodological materials defining the procedures for evaluating knowledge, skills, abilities and (or) experience, characterizing the level of formation of the competencies.

Fund for intermediate certification of students for teaching training

Section titles	Number of points per section	total	form of control	Competences
Preparatory stage	10	**100**	recitation	GPC 1, GPC-2
Main stage	70		- tests with grades based on the results of student activity: - plan and text of the lecture, -plan practical (seminar, laboratory classes), presentation, -the workshop, (practical, laboratory) classes, control work, - preparation of FOS, - consultation	GPC 1, GPC-2 BC-3 PC-4
Final stage			report	GPC-2

Compliance of grading systems (used previously, estimates of final academic performance, ECTS grades and point-rating system of current performance grades) (In accordance with the Rector's Order No. 996 dated December 27, 2006)

Points	Traditional grades in RF	Grade transfer points for	Grades	Grades ECTS
86-100	5	95-100 86-94	5+ 5	A B
69-85	4	69-85	4	C
51-68	3	61-68 51-60	3+ 3	D E
0-50	2	31-50 0-30	2+ 2	FX F
51-100	Зачет	51-100	Зачет	Passed

Grades	Conditions of receipt
excellent	- full implementation of the tasks and content of the program activities; - demonstration of a high level development of a design, organizational, analytical, reflexive skills by a graduate student; - manifestation of a high level of psychological-pedagogical, methodical and substantive training of a graduate student, - formation of competencies; - manifestations of creativity, initiative, - independence, high level of responsibility; - high-quality record keeping.
good	- implementation of the objectives and content of the program activities in full; - demonstration of a fairly good level of development of an phd student of design, organizational, analytical, reflective skills; - insufficient manifestation of creativity, autonomy, initiative; - manifestations of a sufficiently good level of psychological and pedagogical, methodical and substantive training of a graduate student, the formation of competencies;
satisfactorily	- implementation of an incomplete list of tasks and content of the program of activities; - demonstration of a satisfactory level of development of design, organizational, analytical, reflective skills; - insufficient manifestation of creativity, autonomy, initiative; manifestations of psychological and pedagogical, methodical and objective knowledge and skills, - the formation of professional competencies at the secondary level;
unsatisfactory	- implementation of a part of the tasks and the core activity; - demonstration of a low level of development of a graduate student of design, organizational, analytical, reflexive abilities; - lack of creativity, autonomy, initiative; - - low level of psychological and pedagogical, methodical and substantive training of a graduate student, - unformed competences;

Evaluation tools for intermediate certification

According to the results of teaching practicum a report is compiled, which is heard at the meeting of the department. The control at the intermediate stages is carried out in the form of interviewing the head of the practice with a graduate student, reviewing the shortcomings of the classes conducted by the graduate student.

Typical control tasks or other materials necessary for the assessment of knowledge, skills, skills and (or) experience that characterizes the stages of the formation of competencies in the process of mastering the educational program.

1. Preparation of the plan, theses and the full text of the lectures, seminars.

2. Preparation of presentations on the subject of the lesson.

3. Preparation of tests on the instructions of the supervisor.

4. Preparation of control tasks on behalf of the supervisor.

Developers

Associate professor, Doctor of Economics		Redina Margarita M.
должность	подпись	инициалы, фамилия
Senior lecturer, Ph.D, in Biology		Kapralova Daria O.
должность	подпись	инициалы, фамилия
должность	подпись	инициалы, фамилия