

**Federal State Autonomous Educational Institution of Higher Education**

RUDN University  
*Agrarian and Technological Institute*

**PROGRAM  
TEACHING PRACTICES**

**Recommended for the course**  
06.06.01 Biological sciences

**Profile:**  
03.02.07 «Plant Genetics»

(higher education – training of highly qualified personnel)

**Graduate qualification (Degree):**  
Researcher. Research teacher

MOSCOW

All practices in this educational program are conducted in accordance with the ES HE RUDN in the direction of training 06.06.01 Biological Sciences (qualification (degree) Researcher. Teacher-researcher) and the "Provision on the procedure for conducting practices of students in RUDN full-time, part-time and part-time training ", approved by the order of the rector of April 22, 2014 № 268.

### **1. Purpose of production practice**

*The purpose of teaching practice is:*

- formation of universal, general professional and professional competencies.
- consolidation and deepening of the theoretical knowledge obtained in the studied disciplines;
- mastering the necessary methods of training and education in the field of education;
- introduction to the social environment of an educational institution in order to acquire the social and personal competencies necessary to work in the field of education.
- formation and consolidation of the skills of pedagogical activity, application of knowledge and skills obtained in training in independent professional activities, supervised by the practice curator and / or the supervisor of the postgraduate student.

### **2. Tasks of pedagogical practice**

The tasks of teaching practice are:

- acquisition of skills in teaching and educational work in higher education.
- acquisition of skills for the preparation of reference, auxiliary, control training materials, presentations and their use in 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.
- deepening and consolidating the theoretical knowledge obtained during training at the previous stages of higher education;
- the acquisition and consolidation of sustainable skills in the student audience.

### **3. Place of practical training in the structure of EP**

Pedagogical practice in the system of training highly qualified personnel is a component of vocational training for scientific and pedagogical activity in a higher educational institution and is a type of practical activity of post-graduate students in the implementation of the educational process in higher education, including the teaching of special disciplines, the organization of educational activities of students, methodical work on the subject, aimed at obtaining the skills and abilities of practical teaching activity .

Pedagogical practice for students in the basic educational programs (profiles) of the postgraduate course in the direction of "Agriculture" is part of the educational component provided by the curriculum.

The logical relationship of pedagogical practice with other parts of the PLO can be traced in the presence of identical terms, in the corresponding thesauris, similar components of conceptual terminological systems, and unified general scientific approaches to solving problems (activity approach, system analysis).

The basis of the substantive and methodological relationship of pedagogical practice with other parts of the PLO is the formation of universal, general professional and professional competencies listed in the tasks of the practice.

Requirements for input knowledge, skills and readiness of students, acquired as a result of the development of the previous parts of the PLO, and necessary for the development of teaching practice:

A graduate student, starting to master the teaching practice, should

**know:**

- The scientific basis of the subject being taught;
- the content of the subject being taught;
- value bases of professional activities in the field of education;
- the essence and structure of the educational process;
- The main ways of legal processing of information;
- The basis of modern technologies for collecting, processing and presenting information;
- Methodology of pedagogical research of educational problems;
- Theories and technologies of training and education of the student;
- ways of interaction of the teacher with various subjects of the pedagogical process;
- ways of professional self-knowledge and self-development;

**be able to:**

- - systematically analyze and select educational competencies;
- - use diagnostic methods to solve various professional problems;
- - take into account in the pedagogical interaction various features of students;
- - to design an educational process using modern technologies that meet the general and specific patterns and peculiarities of personal development;
- - design elective courses using the latest achievements of science;
- - use in the educational process a variety of resources, including the potential of other academic subjects;
- - to organize extracurricular activities of students;
- - use theoretical knowledge to generate new ideas in the field of education;

**possess:**

- ways of orientation in professional sources of information (ATP, magazines, websites, educational portals, etc.)
- various means of communication in professional pedagogical activity;
- methods of project and innovation activities in education;
- ways to improve professional knowledge and skills by using the capabilities of the information environment of the educational institution;
- Acquisition technologies for the use and updating of humanitarian, social, economic and professional knowledge;
- skills of reflection, self-esteem, self-control;
- various ways of verbal and non-verbal communication;
- the main methods of information processing;
- software skills.

#### **4. Forms of teaching practice**

The main form of pedagogical practice is the practice of obtaining universal and professional skills and professional experience in teaching.

The head of the practice from the department and / or the research supervisor of the graduate student plans, organizes and controls the pedagogical activity of the graduate student, entrusting him with the implementation of the specific training procedures outlined in this program. The graduate student in this case performs the functions of an intern, participating throughout the entire period of practice in the teaching activities of his supervisor.

The content of the practice can be expressed in the participation and conduct of a graduate student, both under the guidance of a teacher and in his presence, lectures, seminars, consultations, practical exercises, laboratory work, examinations, colloquiums, monitoring, intermediate certification, organization of students' independent work.

For persons with disabilities I, II, III groups and persons with disabilities, practical training is established taking into account the peculiarities of psychophysical development, individual abilities and health status.

## 5. Place and time of teaching practice

Pedagogical practice is a stationary practice and is carried out in the structural units of RUDN.

A stable base of teaching practice is the department that implements the profile of graduate school.

It is carried out on the first, second and third year of study without interruption from theoretical training during all semesters.

## 6. Student competences generated as a result of teaching practice

As a result of this practice, the student should acquire the following practical skills, abilities, and general professional competences:

<b>General Professional Competences</b>	
Readiness for teaching on the basic educational programs of higher;	GPC-2
<b>Professional competences:</b>	
The ability to analyze modern problems in Biology and to use fundamental biological concepts in the sphere of professional activity for setting and solving new problems	PC-1
The ability to use basic theories, concepts and principles in the chosen field of activity, mastery of efficient ways of thinking	PC-2
The ability to independent analysis of available information, identification of fundamental problems, setting goals and objectives of the research, performing laboratory biological research in solving specific tasks by specialization with the use of modern equipment and computer facilities, demonstrating responsibility for the quality of work and scientific reliability of the results	PC-3
Knowledge of history and methodology of Biological sciences, which expand the general professional, fundamental training	PC-4
The ability to creatively apply modern computer technologies in the collection, storage, processing, analysis and transferring of biological information	PC-6
The ability to understand and deeply comprehend the philosophical concepts of natural science, the place of the natural sciences in developing a scientific worldview	PC-7
Use the skills to organize and manage the work in professional collectives, ability to interdisciplinary communication and to free business communication in Russian and foreign languages, work in international collectives	PC-8
The ability to professionally design, submit and report the results of scientific research and industrial-technological work on approved forms	PC-9

As a result of pedagogical practice, a graduate student should demonstrate the following results:

### 1) *To know*

- general scientific approaches to solving methodological problems;
- psychological and pedagogical features of training;
- modern learning technologies at the levels of the school subject, section, topic

### 2) *To be able to*

- to organize the educational process of education at different levels and profiles of higher education;
- to carry out planning of educational work;

- carry out the learning process with a focus on the tasks of training, educating and developing the personality of the learner and taking into account the specifics of teaching
- rationally select the content of any organizational form of education, highlighting in it the most important, essential and concentrating on it the attention of students;
- optimally select methods of organizing educational activities, methods of stimulation and control, taking into account the peculiarities of the content of the topic and the individual capabilities of each student;
- use information technology when conducting academic work;
- to analyze their own activities in order to improve them and improve their skills;
- use advanced teaching experience, combining traditional and innovative learning technologies.

### 3) *To possess*

- skills to set goals and formulate the tasks of pedagogical activity, to predict the development and upbringing of the student's personality;
- conceptual and categorical apparatus of methodical science;
- Skill professional self-assessment activities.
- methodology of scientific and practical professional activities.

## 7. The structure and content of teaching practice

The total rendered service of the practice is 18 credits, 648 hours.

№	Sections (stages) of practice	Types of production work, in practice, including the independent work of graduate students and rendered service (in hours)		Type of Periodical Assessment
		Room	Indiv. work	
1.	Preparatory	5	8	Oral recitation
2.	Main	500	100	Differentiated tests
3.	Final	5	30	Written report

### *Activities in practice*

#### **Stage 1 (preparatory):**

- an introductory lecture is held, where students are introduced to the rules of labor protection, safety, with the goals, objectives and content of teaching practice. In addition, students receive advice on the design of documents, installation on communication with the staff of an educational institution. An individual practice task is compiled with a practice leader.

In an educational institution, graduate students get acquainted with the tasks of educational and methodological work of a particular institution, with the administration, teaching staff, and students.

At this stage of pedagogical practice, graduate students begin to study the educational process, attend classes and, in conclusion, conduct an oral survey on materials that the graduate student studied during this phase. The results of the survey are fixed with the mark "offset", "fail".

#### **Stage 2 (main):**

1. the replenishment of their professional knowledge in the field of the taught discipline through self-study;

2. study of the experience of teaching leading teachers, technical assistance to the supervisor in conducting lectures, seminars and practical classes with students;

3. preparation of training materials for seminars, practical and laboratory classes in the discipline being taught and their submission for inspection by the head;

4. development under the control and with the help of the head of the plan and the text of the lecture or the plan of practical (seminar) classes and presentations on one of the main and topical topics of the course taught, which coincides (ideally) with the topic of his dissertation research;
5. conduct, under the guidance of the supervisor, seminars and workshops with students;
6. carrying out under the guidance of the supervisor of activities for the current and intermediate control of students;
7. consultation with students;
8. Participation, together with the supervisor, in the preparation and improvement of curricula for the course taught, guidelines for conducting practical and seminar classes on specific topics.

*The third (final) stage* provides for summing up the practice. Graduate students summarize their pedagogical experience in reports and reports. The teachers analyze their activities, 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 and educational activities, taking into account the attitude of each graduate student to the pedagogical activity in general, participation in the analysis of classes and documentation.

#### **8. Research and research and production technologies used in manufacturing practice**

1. multimedia technology.

#### **9. Teaching and methodological support of the independent work of graduate students in teaching practice**

Independent work under the guidance of a teacher envisages preparation for conducting, as well as conducting (in the presence and under the supervision of a teacher) of seminars and practical exercises in an interactive form;

Independent work of a graduate student includes planning of the educational process, the development of educational and methodological, test and measurement materials, methodological materials for electronic courses.

During the internship the graduate student must:

1. to study and strictly follow the rules of labor protection, safety;
2. complete the scope of work provided for in the program of practice;
3. be responsible for the work performed and its results;
4. submit a written progress report in time.

According to the results of teaching practice a graduate student should prepare a detailed written report. The report provides general information (last name, first name, patronymic name, type of practice, practice period), indicates information about the work performed by the graduate student during practice, reflects the results of the practice, taking into account acquired knowledge, skills and abilities, notes problems that have arisen during organization and practice.

The report includes a practice diary signed by a graduate student and supervisor, as well as documents containing information on the results of the student's work during the period of pedagogical practice: a work program prepared by a graduate student in an academic discipline; texts of lectures or guidelines for practical exercises on specific topics; tasks for examinations; test tasks, etc.

The report on the practice of the graduate student must be approved by the supervisor and after that he can receive a credit for the practice.

#### **10. Educational and methodical and informational support**

1. Pedagogical practice: teaching aid / - Omsk : Omsk State University, 2012. - 68 p. - ISBN 978-5-7779-1422-4; The same [Electronic resource]. - URL: <http://biblioclub.ru/index.php?page=book&id=238039> .
2. Reference and legal system "Consultant Plus".
3. Reference and legal system "GARANT".

4. Literature corresponding to the direction of the study.

Databases, reference and search engines:

1. [www.edu.ru](http://www.edu.ru)
2. Documents and materials of the activities of the Federal Education Agency:  
[www.ed.gov.ru](http://www.ed.gov.ru)
3. A single collection of digital educational resources: <http://school-collection.edu.ru>
4. dictionaries and other background information:
5. <http://www.iiorao.ru>
6. <http://www.gpntb.ru/win/book/> – New systematized Explanatory Dictionary of the Russian National Public Library for Science and Technology.

## **11. Material and technical support of educational practice**

Availability of computers and multimedia technology

*Software:*

1. graphic resources of text editor Microsoft Word;
2. presentation program Microsoft PowerPoint for Windows;

To conduct teaching practice, specially equipped classrooms and a computer classroom with workplaces providing Internet access, as well as multimedia equipment for the presentation of presentations in the classroom are necessary.

The implementation of the practice program should be provided by each graduate student's access to information resources — the institute library of RUDN University and the Internet network 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 regulations, as well as safety requirements.

## **12. Intermediate certification forms**

Following the results of the pedagogical practice, the graduate student compiles a report that includes the developed lesson plans on the topics of the discipline taught in the department, didactic material, recommended literature, guidelines and recommendations, as well as a presentation and a fragment of test tasks on the discipline. Documents can be attached to the report, which contain information about the student's work results during the period of pedagogical practice (for example, texts of articles or reports prepared by a graduate student on materials collected in practice).

Trainees who have undergone internship at other educational organizations may be credited with the practice after the submission of the relevant practice report.

A student who has not completed the internship program without a valid reason, has received a negative review of work or an unsatisfactory rating while defending a report, by decision of the dean's office, in consultation with the relevant department, may be sent to the internship again during his free time or seems to be discharged as not fulfilling his duties of conscientious mastering. educational program and curriculum implementation.

Students who have not passed the practice of any type for a good reason, practice on an individual plan.

## **13. Fund of appraisal funds for the intermediate certification of students in the discipline**

### **REGULATION ON POINT-RATING SYSTEM on "Pedagogical practice"**

**Profile 06.01.07 «Plant Protection»**

Number of credits per semester - 18.

Maximum points – 100.

Type of assessment – test.

**Points are awarded according to the table:**

Controlled competence code	Type of students' work	Maximum amount of points
GPC-2	<b>Participation in the setup of conference</b>	<b>10</b>
PC-1	<b>Implementation of teaching plan</b>	<b>10</b>
PC-2		
PC-3	<b>The current pedagogical work of a graduate student.</b>	<b>50</b>
PC-4		
PC-6		
PC-7	<b>Preparation of report</b>	<b>15</b>
PC-8	<b>Report in the department</b>	<b>15</b>
PC-9		
<b>Total</b>		<b>100</b>

The results of each type of practice 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 submission is the University adopted a point-rating system:

Points PRS	Traditional grades in the Russian Federation	Points equivalent to grades	Grades	Grades ECTS
86- 100	5	95-100	5+	A
		86-94	5	B
69-85	4	69-85	4	C
51 -68	3	61 -68	3+	D
		51 -60	3	E
0-50	2	31 -50	2+	FX
		0-30	2	F

A graduate student cannot be certified if he has not mastered all the topics and sections of the discipline specified in the summary assessment table of the discipline “Safety in Emergency Situations”. A section or topic of a discipline is considered mastered if a graduate student has scored more than 50% of the possible number of points in this section (topic).

By the decision of the teacher and with the consent of graduate students who have not mastered the sections (topics) of the discipline under study, current monitoring of progress or repeated educational tasks on these topics or sections can be repeated. In this case, graduate students for this work counted the minimum possible positive score.

When a graduate student performs additional learning tasks, or re-passes current monitoring activities, his points will be counted in specific topics. **In this case, the total amount of points cannot exceed the maximum number of points set on these topics.**

**A graduate student is certified only if he has scored at least 51 points in a semester.**



**Implementor:**

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