Документ подписан простой электронной подписью Информация о владельце:

ФИО: Ястребов Олег Алекс Prederal State Autonomous Educational Institution of Higher Education

Уникальный программный ключ:

ca953a0120d891083f939673078ef1a989dae18a

Должность: РекторЕорLES', FRIENDSHIP UNIVERSITY OF RUSSIA NAMED AFTER PATRICE **LUMUMBA RUDN** University

ENGINEERING ACADEMY

(educational division (faculty/institute/academy) as higher education programme developer)

RESEARCH PLAN

Recommended by the Didactic Council for the Education Field of:

1.6.9. Geophysics

1.6.10. Geology, prospecting, and exploration of solid minerals, minerageny 1.6.11. Geology, prospecting, exploration and exploitation of oil and gas fields

(field of studies / speciality code and title)

The student's internship is implemented within the professional education programme of higher education:

Geophysics

Geology, prospecting, and exploration of solid minerals, minerageny Geology, prospecting, exploration and exploitation of oil and gas fields

(higher education programme profile/specialisation title)

1. GOAL(s) OF SCIENTIFIC RESEARCHES

The purpose of scientific research (implementation of scientific (research) activities) is to prepare a thesis for the degree of Candidate of Sciences (hereinafter - thesis) for the defense.

the list of planned results on the results of scientific research;

- the scope of scientific research;
- an approximate plan of scientific research;
- the plan of preparation of the thesis and publications, in which the main scientific results of the thesis are set out;
- the list of stages of mastering the scientific component of the postgraduate program, the distribution of these stages and the final certification of graduate students.

2. PLANNED RESULTS OF SCIENTIFIC RESEARCH

The solution of a scientific problem of importance for the development of the corresponding branch of science or the development of a new scientifically justified technical, technological or other solution of significant importance for the development of the country.

Preparation of the thesis for the defense includes the implementation of an individual plan of scientific activity, writing, registration and presentation of the thesis for the final attestation.

Plan of scientific activity includes a sample plan of scientific research, plan of dissertation preparation and publications, in which the main scientific results of the dissertation are set out, as well as a list of stages of mastering the scientific component of the graduate program, the distribution of these stages and the final certification of graduate students.

The plan of scientific activities of a particular student is approved in the individual plan of scientific activities of the graduate student, the requirements to which are established by the relevant local normative act of PFUR.

3. SCOPE OF SCIENTIFIC RESEARCH

The total labor input of scientific research is 150 credit units (5400 ac.h.).

4. STAGES OF SCIENTIFIC RESEARCH

Name of stage	Content of the stage (topics, activities)	Labor intensity, ac.h.	
1 course			
Section 1. Postgraduate research activities aimed at preparing a dissertation for defense	Theme 1: Choosing the topic of the dissertation dissertation plan		
	Theme 2: Structure development and drafting		
	Theme 3: Preparing a review of the dissertation topic	1476	
	Theme 4: Making a bibliography on the topic of the dissertation based on stock materials, monographs, scientific collections, domestic and foreign periodicals, as well as Internet resources (not less than 150 sources)		
	Organization and conduct of experiments. Theme 1: Collection, processing and analysis of scientific and statistical information on the topic of the dissertation work on stock and published works.		
	Theme 2: Material, methodology and conditions for conducting experiments		

Name of stage	Content of the stage (topics, activities)	Labor intensity, ac.h.	
	Theme 3: Primary documentation of observations and experimental data.		
	Theme 4: Gathering empirical material (based on observations, experimental data).		
Section 2: Preparation of	Theme 1: Analysis of domestic and foreign Publications of scientific periodicals included in Scopus databases	216	
publications in which the main scientific results of the thesis are presented	Theme 2: Selection of domestic and foreign Publications on the topic of the dissertation Theme 2: Studying the appring part for publications in		
	Theme 3: Studying the requirements for publications in periodicals of the Web of Science database		
Intermediate attestation	TOTAL:	72 1764	
2 course	TOTAL.	1/04	
2 Course	Organization and conduct of experiments.		
Section 1. Postgraduate research activities aimed at preparing a dissertation for defense	Theme 1: Collection, processing and analysis of scientific and Statistical information on the topic of the dissertation work on stock and published works. Theme 2: Material, methodology and conditions for conducting experiments Theme 3: Primary documentation of observations and experimental data. Theme 4: Gathering empirical material (based on observations, experimental data). Methods and ways of processing empirical materials. Theme 5: Graphic methods of processing materials. Theme 6: Statistical methods of material processing. Theme 7: Computer models. Analysis and interpretation of empirical material. Topic 8: Analysis and interpretation of empirical Computer-based materials for local objects. Theme 9: Identification and formulation of natural laws characteristic of local objects. Theme 10. Analysis and interpretation of empirical materials based on computer technology for regional sites.	1404	
Section 2: Preparation of	Theme 11. Identification and formulation of natural laws characteristic of regional objects. Preparation of the thesis: Theme 1: Formulation of defensible scientific statements on the topic of the dissertation. Theme 2: Writing Dissertation Chapters Theme 3: Making a list of literary sources and making references to them in the text dissertation Theme 1: Selection of domestic and foreign Publications on the topic of the dissertation		
publications in which the main scientific results of the thesis are presented	Theme 2: Preparing manuscripts of articles for Publication in periodicals of the bases Theme 3: Presentations at scientific	216	
	conferences and meetings on theses topics		
Intermediate attestation	mo=1-7	72	
	TOTAL:	1692	

Name of stage	Content of the stage (topics, activities)	Labor intensity, ac.h.	
3 course			
	Preparation of the dissertation:		
	Theme 1: Writing Dissertation Chapters		
	Theme 2: Making a list of literary sources and making		
	references to them in the text of the dissertation		
	Theme 3: Preparation of the Dissertation Text		
	Theme 4: Preparation of the text of the abstract		
	Theme 5: Preparation of the Report and Preliminary		
	Defense of the Dissertation		
G di 1 D d 1 d	Theme 6: Preparation of Documents Required for		
Section 1. Postgraduate	Defense at the Academic Dissertation Council		
research activities aimed at	Theme 7: Selecting the opposing scientific organization	1656	
preparing a dissertation for defense	and providing it with the materials of the thesis		
defense	Theme 8: Selection of scientific opponents and		
	providing them with materials of the dissertation work.		
	Theme 9: Placement of the text of the dissertation in		
	Internet resources, according to the requirements of the		
	BAK		
	Theme 10. Distribution of thesis abstracts for feedback		
	from scientific organizations and specialists.		
	Theme 11. Preparing a Report for the Dissertation		
	Defense at the Academic Dissertation Council		
	Theme 1: Selection of domestic and foreign		
Section 2: Preparation of	Publications on the topic of the dissertation	216	
publications in which the	Theme 2: Preparing manuscripts of articles for		
main scientific results of the	Publication in periodicals of the bases	210	
thesis are presented	Theme 3: Presentations at scientific		
	conferences and meetings on theses topics		
Intermediate attestation		72	
	TOTAL:	1944	

5. MATERIAL AND TECHNICAL SUPPORT FOR SCIENTIFIC RESEARCH

5. MATERIAL AND TECHNICAL SUITORT FOR SCIENTIFIC	KESEAKCII
Auditorium with a list of logistics	Location
Study room for independent, scientific and methodical	
research work of students and practical classes	
Set of specialized furniture:	Moscow,
student's workplace (10 pcs.), teacher's workplace (1 pc), chalkboard.	Ordzhonikidze st. 3
Demonstration stands, computer, monitor, there is a network access to the Internet.	

6. WAYS OF CONDUCTING SCIENTIFIC RESEARCH

Scientific research can be carried out both at RUDN structural divisions or in Moscow organizations (stationary) and at bases outside Moscow (off-site).

Research at an outside organization (outside PFR) is carried out on the basis of a corresponding contract, which specifies the terms, place and conditions of the research at the base organization.

The timing of the research corresponds to the period specified in the academic calendar of the graduate program. The terms of the internship can be adjusted in coordination with the PFUR Department for training of higher-education personnel.

7. RESOURCES RECOMMENDED FOR SCIENTIFIC RESEARCH

Main readings:

- 1. Federal Law No. 127-FZ of August 23, 1996 "On Science and State Scientific and Technical Policy".
- 2. Decree of the Government of the Russian Federation of September 24, 2013 № 842 "On the procedure for awarding academic degrees".
 - 3. Shklyar M.F. Fundamentals of Scientific Research: Textbook / M.F. Shklyar. 6th ed. Moscow Publishing and Trading Corporation "Dashkov and K°", 2017. 208 c. (Textbooks for bachelors). Bibliography. c. 195-196. ISBN 978-5-394- 02518-1; [Electronic resource]. URL:httn://biblioclub.ru/index.php?nane=book&id=450782
 - 4. Gorelov S.V., Gorelov V.P., Grigoriev E.A., eds. by Gorelov V.P. Edition 2 ed. Moscow Berlin Direct-Media, 2016. 534 c. ISBN 978-5-4475-8350-7 [Electronic resource]. httn://b1b1ioclub.ru/index.nhn?nane=book&id=443846
 - Komlatsky, V.I. Planning and organization of scientific research textbook / V.I. Komlatsky, S.V. Loginov, G.V. Komlatsky. Rostov-on-Don Publishing House "Phoenix", 2014. 208 c. (Higher education). ISBN 978-5-222-21840-2 [Electronic resource]. URL:httn://b1b1ioclub.ru/index.php?nane=book&id=271595

Additional readings:

- 1. Musina O.N. Fundamentals of scientific research: textbook / O.N. Musina. Moscow; Berlin: Direct-Media, 2015. 150 c. Bibliography in the book ISBN 978-5-4475-614-4; Electronic resource]. <u>URL:http://biblioclub.ru/index.php?page=book&id=278882</u>
- 2. Azarskaya M.A. Research work in higher education: textbook / M.A. Azarskaya, V.L. Pozdeev; Volga Region State Technological University. Yoshkar-Ola: PSTU, 2016. 230 c.: ill. Bibliography: pp. 166-168. ISBN 978-5-8158-1785-2; Same [Electronic resource]. URL: http://biblioclub.ru/index.php?page=book&id=461553

Internet sources

- 1. Electronic libraries (EL) of RUDN University and other institutions, to which university students have access on the basis of concluded agreements:
 - RUDN Electronic Library System (RUDN ELS) http://lib.rudn.ru/MegaPro/Web
 - EL "University Library Online" http://www.biblioclub.ru
 - EL "Yurayt" http://www.biblio-online.ru
 - EL "Student Consultant" www.studentlibrary.ru
 - EL "Lan" http://e.lanbook.com/
 - EL "Trinity Bridge"

2. Databases and search engines:

- electronic foundation of legal and normative-technical documentation http://docs.cntd.ru/
- Yandex search engine https://www.yandex.ru/
- Google search engine https://www.google.ru/
- Scopus abstract database http://www.elsevierscience.ru/products/scopus/

The training toolkit and guidelines for a student to do an internship, keep an internship diary and write an internship report:

1. Safety regulations to do the internship (safety awareness briefing).

8. ASSESSMENT TOOLKIT AND GRADING SYSTEM FOR EVALUATION OF STUDENTS' COMPETENCES LEVEL AS INTERNSHIP RESULTS

Mandatory student activities:

Year 1 of study:

- preparation and discussion in the department of the thesis concept and approval of the topic;
 - preparation of historiographic and experimental/source base of research;
 - presentation at a scientific conference;

Year 2 of study:

- preparation and discussion in the department of part of the dissertation;
- presentation at a scientific conference;
- Publication of at least two scientific articles, including one scientific article on the topic of research in a journal included in the list of the Higher Attestation Commission and/or RUDN or SCOPUS, Web of Science and other equivalent and/or approved by the RUDN Academic Council;

Year 3 of study:

- preparation of the entire dissertation and presentation to the supervisor;
- publication of at least three scientific articles, including two scientific articles on the topic of research in journals included in the list of the Higher Attestation Commission and/or RUDN and SCOPUS, Web of Science, other, equated to them and/or approved by the RUDN Academic Council:
 - passing the discussion of the dissertation at a meeting of the BD;

As a result of the stages of detection of scientific research graduate student submits to the supervisor or to the meeting of the BD detailed oral or written report. The report includes information describing the content of the graduate student's work and reflecting the implementation of scientific research.

The report should include information:

- on the degree of readiness of the dissertation;
- -Reports on the preparation and publication of articles in journals included in the VAK list, RSCI, Scopus, Web of Science and other equivalent journals and/or approved by the PFUR Academic Council;
- participation of the postgraduate student in scientific and technical events on the topic of his/her research;
 - participation in the department's research work (if any);
 - other.

The supervisor provides feedback on the quality, timeliness and success of the stages of scientific (research) activities of the graduate student during the period of interim certification.

The results of research for each year of study are determined by conducting interim certification with grades "excellent", "good", "satisfactory", "unsatisfactory" and in the system of ECTS (A, B, C, D, E). The basis for their grading is the University's grading system.

DEVELOPERS:

Assistant Professor of the Basic		
Department of Subsoil Use and Oil	A.E.Kotelnikov	
and Gas		
position, educational department	signature	name and surname.

HEAD OF EDUCATIONAL DEPARTMENT:

Head of the Basic Department of		A.E.Kotelnikov	
Subsoil Use and Oil and Gas			
educational department	signature	name and surname.	