граммный ключ: L083f939673078ef1a989dae18a	tion "Peoples' Friendship University of Russia» Medical Institute
(name of the main ed	ucational unit (EIU) - the developer of the postgraduate program)
	of Management and Economics of Pharmacy
(name of the basic	educational unit (BUP)-developer of the postgraduate program)
Ι	DISCIPLINE WORK PROGRAM
	Methodology of scientific research
	Name of discipline/module
	•
	Academic specialty:
	Academic specialty.
3.4.3	3 - Social and administrative pharmacy
	(code and name of the scientific specialty)

The study of the discipline is carried out within the framework of the postgraduate program:

Social and administrative pharmacy

(name of postgraduate program)

1. PURPOSE OF MASTERING THE DISCIPLINE

Training of a specialist possessing basic theoretical knowledge and practical skills necessary to carry out scientific work, capable of successfully and timely completion of theses research for the degree of Candidate of Pharmaceutical Sciences.

2. REQUIREMENTS FOR THE RESULTS OF MASTERING THE DISCIPLINE

As a result of studying the discipline, the graduate student should:

know:

- methods of analysis and evaluation of modern scientific achievements;
- methods of scientific research activity;
- peculiarities of the presentation of the results of scientific activity in written form when working in Russian and international teams;
- principles of analysis and generalization of research results, modern methods of statistical processing of research results, ways of public presentation of scientific data;
- modern methods of collection and processing of information in the field of organization of pharmaceutical business and related fields, forms of public presentation of scientific data.

be able to:

- Perform research work in the field of pharmacy (organization of pharmacy) relevant to health care practice;
- analyze alternative options for solving research and practical problems;
- analyze and summarize the results of scientific research, present them in the form of scientific publications and reports;
- to systematize and summarize the experience of scientific research in the field of pharmacy.

possess:

- skills of critical analysis and evaluation of modern scientific achievements;
- the skills of technology planning of professional activities in the field of scientific research;
- skills of independent carrying out of the applied scientific researches in the field of pharmacy on the basis of principles of the good pharmaceutical practices;
- the skills of implementing the results of modern scientific research in practical pharmacy, organization and interaction of the scientific school and practical health care;
- methods of planning, organizing and conducting scientific research, which allows to obtain new scientific facts, significant for the pharmaceutical industry;
- skills of analysis, generalization and registration of the results of scientific research, public presentation of the results of the research.

3. DISCIPLINE'S VOLUME AND TYPES OF ACADEMIC WORK

The total labor input of the discipline "Methodology of scientific research" is 2 credit units.

Table 3.1. Types of educational work by periods of study of the postgraduate program

Type of study work	TOTAL,	Course			
Type of study work	ac.h.	1	2	3	
Contact work, ac.h.	18	18	-	-	-

Type of study work		TOTAL,		Course		
		ac.h.	1	2	3	
including:						
Lectures (LL)		12	12	-	-	
Laboratory work (LW)						
Practical/seminar classes (SP)		6	6	-	-	-
Independent work of students, ac.h.		45	45	1	-	-
Control (credit with grade), ac.h.		9	9	1	-	-
Total labor input of the discipline	acc.h.	72	72	-	-	-
1 otal labor input of the discipline	credit	2	2	-	-	-

4. CONTENT OF THE DISCIPLINE

Table 4.1. Content of the discipline (module) by type of study work

Title of the section of the discipline	Contents of the section (topics)	Type of academic work
Section.1. Methodological foundations of scientific cognition.	Theme 1.1. Science as a specific form of activity	LL
	Theme 1.2. The method of scientific cognition: the essence, content, main characteristics.	LL
Section 2. Ethical aspects of scientific research.	Theme 2.1. Biomedical research. Ethical aspects of scientific research.	LL
Section 3. The methodology of dissertation research.	Theme 3.1. Structure of scientific dissertation research.	LL
	Theme 3.2 Stages of dissertation research	LL
	Theme 3.3. Requirements for the structure, content and design of a dissertation. Thesis defense.	SP
Section 4. Good Scientific Practice	Theme 4.1. Basic principles of good scientific practice.	SP
Section 5. Processing and analysis of scientific research results	Theme 5.1. Basics of biomedical statistics	SP
Section 6. Formation of scientific	Theme 6.1. Presentation of the results of the study.	SP
research.	Theme 6.2. Principles of writing scientific articles, reports.	SP

5. MATERIAL AND TECHNICAL SUPPORT OF THE DISCIPLINE

Table 5.1. Material-technical support of the discipline

Type of classroom	Equipment of the classroom	Specialized training/laboratory equipment, software and materials for mastering the discipline (if necessary)
Auditorium (452)	Auditorium for laboratory, practical classes and seminars, individual consultations, current monitoring and interim certification, equipped with a	Microsoft products (OS, office suite) (Enrollment for Education Solutions (EES) Subscription No. 56278518 dated 23/04/2019)

Type of classroom	Equipment of the classroom	Specialized training/laboratory equipment, software and materials for mastering the discipline (if necessary)
	set of specialized furniture and technical means of multimedia presentations.	Garant (Contract No. 13A/46/2018 dated 02/04/2018) Consultant Plus (Information Support Agreement dated 01/09/2013) Reg. number tso-03-207-7474 of 09.13
Auditorium (453)	Auditorium for seminars, group and individual consultations, current monitoring and interim certification, equipped with a set of specialized furniture and technical means of multimedia presentations.	Microsoft products (OS, office suite) (Enrollment for Education Solutions (EES) Subscription No. 56278518 dated 23/04/2019) Garant (Contract No. 13A/46/2018 dated 02/04/2018) Consultant Plus (Information Support Agreement dated 01/09/2013) Reg. number tso-03-207-7474 of 09.13
Training room for practical skills training - Simulation Training Center "Learning Pharmacy", aud. 173.	Set of specialized furniture. Technical means: computer. Visual aids, computer presentations on current topics; label and barcode printer ATOL BP21 RS-232 and USB; receipt printer DX58; customer display SHTRIH-T D2-USB; UPS CyberPower BS850E / UPS 850VA/490W (3+3 EURO)	Microsoft products (OS, office suite) (Enrollment for Education Solutions (EES) Subscription No. 56278518 dated 23/04/2019) Garant (Contract No. 13A/46/2018 dated 02/04/2018) Consultant Plus (Information Support Agreement dated 01/09/2013) Reg. number tso-03-207-7474 of 09.13
Training room for practical skills training - Simulation Training Center "Learning Pharmacy", aud. 175	Set of specialized furniture. Technical means: computer. Visual aids, computer presentations on current topics; UPS CyberPower BS850E /UPS 850VA/490W (3+3 EURO)	Microsoft products (OS, office suite) (Enrollment for Education Solutions (EES) Subscription No. 56278518 dated 23/04/2019) Garant (Contract No. 13A/46/2018 dated 02/04/2018) Consultant Plus (Information Support Agreement dated 01/09/2013)
Training room for practical skills training - Simulation Training Center "Learning Pharmacy", aud.176	Set of specialized furniture. Technical means: computer. Visual aids, computer presentations on current topics; UPS CyberPower BS850E /UPS 850VA/490W (3+3 EURO)	Microsoft products (OS, office suite) (Enrollment for Education Solutions (EES) Subscription No. 56278518 dated 23/04/2019) Garant (Contract No. 13A/46/2018 dated 02/04/2018) Consultant Plus (Information Support Agreement dated 01/09/2013) Reg. number tso-03-207-7474 of 09.13
For independent work of students (aud. 452,453).	Auditoriums for independent work of students are equipped with a set of specialized furniture and computers with access to the EIOS.	Microsoft products (OS, office suite) (Enrollment for Education Solutions (EES) Subscription No. 56278518 dated 23/04/2019) Garant (Contract No. 13A/46/2018 dated 02/04/2018) Consultant Plus (Information Support Agreement dated 01/09/2013) Reg. number tso-03-207-7474 of 09.13

6. EDUCATIONAL AND METHODICAL AND INFORMATIONAL SUPPORT OF THE DISCIPLINE

a) basic literature:

- 1. Соловьева Ю.В.Основы научных исследований: учебное пособие / Ю.В. Соловьева, М.В. Черняев. Электронные текстовые данные. Москва: РУДН, 2022. 140 с.
- 2. Понкин И.В. Методология научных исследований и прикладной аналитики : учебник / И.В. Понкин, А.И. Редькина. Москва : Буки Веди, 2020. 365 с. (Методология и онтология исследований).
- 3. Методология научного творчества : учебное пособие / В.И. Васенев, К.В. Иващенко, Гаджиагаева Рамилла Адим кызы [и др.]. Москва : РУДН, 2019. 80 с.
- 4. Проценко В.Д. Методология научных исследований. Направление 060601 "Биологические науки". Профиль 03.01.09: учебно-методическое пособие / В.Д. Проценко, Е.А. Лукьянова. Количество доступов не ограничено. М.: РУДН, 2016. 29 с.
- 1. Solov'eva Y.V. Fundamentals of scientific research: textbook / Y.V. Solov'eva, M.V. Chernyaev. Electronic text data. Moscow: PFUR, 2022. 140 c.
- 2. Ponkin I.V. Methodology of scientific research and applied analytics: textbook / I.V. Ponkin, A.I. Redkina. Moscow: Bucky Vedi, 2020. 365 c. (Research methodology and ontology).
- Methodology of scientific creativity: textbook / V.I. Vasenev, K.V. Ivaschenko, Gadzhiagaeva Ramilla Adim kizi [et al]. Moscow: RUDN, 2019. 80 c.
- 4. Protsenko V.D. Methodology of scientific research. Direction 060601 "Biological sciences". Profile 03.01.09: tutorial / V.D. Protsenko, E.A. Lukyanova. The number of accesses is not limited. M.: RUDN, 2016. 29 c.

b) additional literature:

- 1. Косова И.В., Лоскутова Е.Е., Лагуткина Т.П., Дорофеева В.В., Теодорович А.А. Управление и экономика фармации. Фармацевтическая деятельность: организация и регулирование: учеб. для студ. учреждений высш. образования / 4-е изд., перераб. и доп. М.: Издательский центр «Академия», 2019.- 400с.
- 2. Теодорович А.А., Косова И.В., Лоскутова Е.Е., Лагуткина Т.П., Дорофеева В.В. Управление и экономика фармации. Учет в аптечных организациях: учеб. для студ. учреждений высш. образования: в 2ч. Ч. 1 / 3-е изд., перераб. и доп. М.: Издательский центр «Академия», 2019.- 272с.
- 3. Теодорович А.А., Косова И.В., Лоскутова Е.Е., Лагуткина Т.П., Дорофеева В.В. Управление и экономика фармации. Учет в аптечных организациях: учеб. для студ. учреждений высш. образования: в 2ч. Ч. 2 / 3-е изд., перераб. и доп. М.: Издательский центр «Академия», 2019.- 192с.
- 4. Дорофеева В.В., Лоскутова Е.Е., Косова И.В., Лагуткина Т.П., Теодорович А.А. Управление и экономика фармации. Экономика аптечных организаций: учеб. для студ. учреждений высш. образования: в 2ч. Ч. 1 / 4-е изд., испр. и доп. М.: Издательский центр «Академия», 2019.- 192с.
- 5. Дорофеева В.В., Лоскутова Е.Е., Косова И.В., Лагуткина Т.П., Теодорович А.А. Управление и экономика фармации. Экономика аптечных организаций: учеб. для студ. учреждений высш. образования: в 2ч. Ч. 2 / 4-е изд., испр. и доп. М.: Издательский центр «Академия», 2019.- 240с.

- 1. Kosova I.V., Loskutova E.E., Lagutkina T.P., Dorofeeva V.V., Teodorovich A.A. Management and Economics of Pharmacy. Pharmaceutical activities: organization and regulation: a textbook for students of higher education / 4th ed., revised. and ext. M.: Publishing Center "Academy", 2019.- 400s.
- 2. theodorovich AA, Kosova I.V., Loskutova E.E., Lagutkina TP, Dorofeeva VV. Management and Economics of Pharmacy. Accounting in pharmacy organizations: textbook for students of higher education institutions: in 2ch. 4. 1 / 3rd edition, revised and ext. M.: Publishing Center "Academy", 2019.- 272p.
- 3. theodorovich AA, Kosova I.V., Loskutova E.E., Lagutkina TP, Dorofeeva VV. Management and Economics of Pharmacy. Accounting in pharmacy organizations: a textbook for students of institutions of higher education: in 2ch. Part 2 / 3rd ed., revised. and ext. M.: Publishing Center "Academy", 2019.- 192p.
- 4. Dorofeeva V.V., Loskutova E.E., Kosova I.V., Lagutkina TP, Teodorovich AA Management and Economics of Pharmacy. Economics of pharmacy organizations: textbook for students of institutions of higher education: in 2ch. Ч. 1 / 4th ed., amended and ext. M.: Publishing Center "Academy", 2019.- 192p.
- 5. Dorofeeva V.V., Loskutova E.E., Kosova I.V., Lagutkina TP, Teodorovich AA Management and Economics of Pharmacy. Economics of pharmacy organizations: textbook for students of institutions of higher education: in 2ch. Part 2 / 4th ed. amended and supplemented. M.: Publishing Center "Academy", 2019.- 240s.

Resources of the information and telecommunication network "Internet":

- 1. the RUDN EBS and third-party EBSs to which university students have access on the basis of contracts:
- PFUR electronic library system PFUR electronic library system http://lib.rudn.ru/MegaPro/Web
 - University Library Online Libraries http://www.biblioclub.ru
 - Yurite electronic library system http://www.biblio-online.ru
 - Student's Consultant electronic library system www.studentlibrary.ru
 - Lan LGS http://e.lanbook.com/
 - LUNT" LBS "Trinity Bridge" 2.
 - 2 Databases and search engines:
- electronic fund 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/

Teaching materials for students' independent work while mastering the discipline/module*:

- 1. Course of lectures on the discipline "Methodology of scientific research".
- 2. Methodological instructions for practical assignments in the discipline "Methodology of Scientific Research".
- 3. Methodological instructions for independent work in the discipline "Methodology of Scientific Research".
- * all educational-methodical materials for students' independent work are placed in accordance with the current order on the page of the discipline in TUIS!

7. ASSESSMENT MATERIALS AND GRADING-RATING SYSTEM FOR EVALUATING THE LEVEL OF COMPETENCE IN THE DISCIPLINE

Assessment materials and grading-rating system of evaluating the mastering of the discipline are presented in the Appendix to the present Working program of the discipline.

* - OM and BRS are formed on the basis of the requirements of the relevant local normative act of PFUR.

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