Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"

Ministry of Health of the Russian Federation

APPROVED
Vice-Rector for Academic Affairs
E.S. Bogomolova
31 August 2021

#### **WORKING PROGRAM**

Name of the academic discipline: INTRODUCTION INTO THE SPECIALTY

Specialty: 33.05.01 PHARMACY

Qualification: PHARMACIST

Department: MANAGEMENT AND ECONOMICS OF PHARMACY AND

PHARMACEUTICAL TECHNOLOGY

Mode of study: FULL-TIME

Labor intensity of the academic discipline: 36 academic hours

The working program has been developed in accordance with the Federal State Educational Standard for the specialty 33.05.01 PHARMACY, approved by Order by Order of the Ministry of Science and Higher Education of the Russian Federation No. 219 of March 27, 2018.

Developers of the working program:

Maxim Alekseevich Mishchenko, PhD in pharmaceutical sciences, associate professor of the Department of management and economics of pharmacy and pharmaceutical technology.

I.V. Spitskaya

The program was reviewed and approved at the department meeting (protocol No. 9 of 29.04.2021).

Acting head of the Department, PhD in pharmaceutical sciences

29.04.2021

AGREED
Deputy Head of EMA ph.d. of biology \_\_\_\_\_\_ Lovtsova L.V.
29.04.2021

## 1. The purpose and objectives of mastering the academic discipline INTRODUCTION INTO THE SPECIALTY (hereinafter – the discipline):

- 1.1. The purpose of mastering the discipline participation in forming the following competencies:
  - universal competence (UC-6).
  - 1.2. Tasks of the discipline:
- 1. Acquaintance of students with a specialty 33.05.01 Pharmacy, the system of higher pharmaceutical education, the place and role of the pharmacist in modern health care in accordance with the requirements for universal, general professional and professional competencies of the pharmacist.
  - 2. Study of the basic concepts and definitions in the field of circulation of medicines.
- 3. Education by students of basic theoretical and applied knowledge about the essence, methods, means, principles of work in the pharmaceutical industry, as well as in preparing students for the implementation of tasks in pharmaceutical activities.
- 4. Training of students' knowledge of pharmaceutical organizations, their types, organizational structure, goals, objectives, functions.
- 5. Review of the historical regularities of the formation of pharmacy as an interdisciplinary field of knowledge, especially the development of domestic and regional pharmacy and the prospects for its development.
  - 1.3. Requirements to the deliverables of mastering the discipline

As a result of completing the discipline, the student should

#### Knows

- basic concepts and professional terminology related to the specialty 33.05.01 Pharmacy;
- the system of training pharmacists under the specialty program 33.05.01 Pharmacy and the system of postgraduate education;
- directions of professional activity of the pharmacist in various fields of modern pharmacy and medicine;
  - the possibilities of the socio-cultural environment of the educational organization;
  - methods of effective time planning;
  - potential strengths and weaknesses of the individual;
  - effective ways of self-learning;
  - criteria for assessing the success of the individual.

#### Be able to:

- draw up long-term and short-term plans;
- analyze life situations and set priorities;
- organize your time;
- form a portfolio;
- plan your professional trajectory;
- plan your life for the period of study in an educational organization;
- identify obstacles that prevent success;
- assess your competitiveness.

#### **Possess:**

- name and their prices
- skills to independently identify motives and incentives for self-development and education throughout life, while defining realistic goals for professional growth;
- skills in determining and implementing the priorities of their own professional activities and ways to improve them on the basis of self-esteem and continuing education.

- 2. Position of the academic discipline in the structure of the General Educational Program of Higher Education (GEP HE) of the organization.
- **2.1.** The discipline refers to the part formed by the participants of educational relations of Block 1 of GEP HE (B1.PER.8).

The discipline is taught in the 1 semester/1 year of study.

- 2.2. The following knowledge, skills and abilities formed by previous academic disciplines are required for mastering the discipline:
  - biology (school course);
  - chemistry (school course).
- 2.3. Mastering the discipline is required for forming the following knowledge, skills and abilities for subsequent academic disciplines:
  - management and economics of pharmacy;
  - information support of the life cycle of medicines;
  - information technologies in pharmacy;
  - general pharmaceutical technology;
  - pharmacognosy;
  - pharmaceutical chemistry;
  - pharmacology;
  - medical and pharmaceutical commodity science;
  - organization of drug provision to the population;
  - state registration and examination of medicinal products;
  - state control and supervision in the field of circulation of medicines;
  - legal basis of the pharmacist's activities;
  - pharmaceutical consulting and information;
  - pharmaceutical propaedeutic practice;
  - pharmacognosy practice;
  - general pharmaceutical technology practice;
  - practice in pharmaceutical technology;
  - practice for quality control of medicines;
  - practice of management and economics of pharmaceutical organizations;
  - practice of pharmaceutical consulting and information.

## 3. Deliverables of mastering the academic discipline and metrics of competence acquisition

Mastering the discipline aims at acquiring the following universal (UC) competence

	Compe-	The content	Code and name of the	As a result of mass	tering the discipline, tl	ne students should:
№	tence code	of the competence (or its part)	competence acquisition metric	know	be able to	possess
1.	UC-6	Able to determine and implement the priorities of own activities and ways to improve it on the basis of self-assessment and lifelong education	UC-6.1. Evaluates its resources and their limits (personal, situational, temporary), optimally uses them for successful execution of the assigned task UC-6.2. Determines the priorities of professional growth and ways to improve their own activities based on self-assessment according to the selected criteria UC-6.3. Builds a flexible professional trajectory using the tools of continuing education, taking into account the accumulated experience of professional activity and dynamically changing labor market requirements	- basic concepts and professional terminology related to the specialty 33.05.01 Pharmacy; - the system of training pharmacists under the specialty program 33.05.01 Pharmacy and the system of postgraduate education; - directions of professional activity of the pharmacist in various fields of modern pharmacy and medicine; - the possibilities of the sociocultural environment of the educational organization; - methods of effective time planning; - potential strengths and weaknesses of the individual; - effective ways of self-learning; - criteria for assessing the success of the individual.	- draw up long-term and short-term plans; - analyze life situations and set priorities; - organize your time; - form a portfolio; - plan your professional trajectory; - plan your life for the period of study in an educational organization; - identify obstacles that prevent success; - assess your competitiveness.	- skills to independently identify motives and incentives for self-development and education throughout life, while defining realistic goals for professional growth; - skills in determining and implementing the priorities of their own professional activities and ways to improve them on the basis of self-esteem and continuing education.

## 4. Sections of the academic discipline and competencies that are formed when mastering them

№	Compete nce code	Section name of the discipline	The content of the section in teaching units
1	UC-6	Introduction to the specialty	The concept of the specialty "Pharmacy". How to become a pharmacist - a specialist with a higher pharmaceutical education. The place of pharmacy in the health care system. The role of the pharmacist in the system of drug provision. The role of the pharmacist in promoting a healthy lifestyle. The system of

pharmaceutical education in the Russian Federation. The system of higher pharmaceutical education in the Russian Federation. The Federal State Educational Standards in the specialty "Pharmacy". Knowledge necessary for a pharmacist in professional activities. Professional standards of pharmacists. Basic pharmaceutical terms and concepts. The concept of circulation of medicines. The concept of research work in the pharmaceutical industry. Ways to create new drugs. Global trends in the development of pharmaceutical science and the pharmaceutical industry. Knowledge necessary for a pharmacist in professional activities in the field of searching for new medicines. The concept of the activities of the pharmacist: pharmaceutical production, pharmaceutical activities, regulatory and control and supervisory activities, pedagogical activity. Knowledge necessary for a pharmacist in professional activities in various areas. The connection of pharmacy with other industries. The concept and directions of pharmaceutical activity. The concept of wholesale and retail trade in medicines and other pharmacy products. Types of pharmacy organizations. Pharmacy chains. The concept of dispensing medications. The concept of a recipe. History of the recipe. Disciplines necessary for the work of a pharmacist in the field of pharmaceutical activity. State regulation of pharmaceutical activities as an element of the system of public health protection. Pharmaceutical specialist and his role in the system of circulation of medicines. Pharmaceutical specialist and responsible self-medication. Pharmaceutical specialist and regulatory regulation of his activities.

5. Volume of the academic discipline and types of academic work

5. Volume of the academic discipline and types of academic work					
	Labor	Labor intensity			
Type of advectional work	volume in	volume in	(AH) in		
Type of educational work	credit units	academic	semesters		
	(CU)	hours (AH)	1		
Classroom work, including	0,61	22	22		
Lectures (L)	0,17	6	6		
Laboratory practicum (LP)*	Laboratory practicums are not stipulated				
Practicals (P)	0,44	16	16		
Seminars (S)	Seminars are not stipulated				
Student's individual work (SIW)	0,39	14	14		
Mid-term assessment					
credit/exam (specify the type)			credit		
TOTAL LABOR INTENSITY	1	36	1		

#### 6. Content of the academic discipline

6.1. Sections of the discipline and types of academic work

$N_{\underline{0}}$	Name of the section of the	Types of academic work* (in AH)					
	academic discipline	L	LP	P	S	SIW	total
1	Introduction to the specialty	6		16		14	36
	TOTAL	6		16		14	36

- \* L lectures; LP laboratory practicum; P practicals; S seminars; SIW student's individual work.
  - 6.2. Thematic schedule of educational work types:6.2.1 Thematic schedule of lectures

No	Name of lacture topics	Volume in AH
NO	Name of lecture topics	1
1.	The system of higher pharmaceutical education in the Russian	1
	Federation. GEF in the specialty "Pharmacy"	1
2.	Basic pharmaceutical terms and concepts	1
3.	State regulation of pharmaceutical activities as an element of the system	1
	of public health protection	1
4.	Pharmaceutical specialist and his role in the system of circulation of	1
	medicines	1
5.	Pharmaceutical specialist and responsible self-medication	1
6.	Pharmaceutical specialist and regulatory regulation of his activities	1
	TOTAL (total – 6 AH)	6

#### 6.2.2. The thematic plan of laboratory practicums Laboratory practicums are not stipulated.

6.2.3. Thematic plan of practicals

No	Name of the tenies of practicals	Volume in AH
NO	Name of the topics of practicals	1
1.	The system of higher pharmaceutical education in the Russian Federation. GEF in the specialty "Pharmacy"	2
2.	Basic pharmaceutical terms and concepts	4
3.	State regulation of pharmaceutical activities as an element of the system	2
	of public health protection	2
4	Pharmaceutical specialist and his role in the system of circulation of	2
	medicines	2
5.	Pharmaceutical specialist and responsible self-medication	2
6.	Pharmaceutical specialist and regulatory regulation of his activities	2
7.	CREDIT	2
8	TOTAL (total – 16 AH)	16

#### 6.2.4. Thematic plan of seminars Seminars are not stipulated.

6.2.5. Types and topics of student's individual work (SIW)

No	Tymes and tonics of CIVI	Volume in AH
	Types and topics of SIW	1
1.	Working with literature and other sources of information on	6
	the studied section	
2.	Assignments in the form of reports and speeches	4
3.	Working with electronic educational resources	4
4.	TOTAL (total – 14 AH)	14

#### 7. Types of assessment formats for ongoing monitoring and mid-term assessment

No Types of control Name of section	Assessment formats
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	Semes		of academic		number	number of
	ter		discipline	types	of test	test task
	No.				questions	options
1	2	3	4	5	6	7
1.	1	Current monitoring: Control of mastering the topic Monitoring the student's individual work	Introduction to the specialty	Test work	5	5
2.	1	Mid-term assessment		Credit	3	40

# 8. Educational, methodological and informational support for mastering the academic discipline (printed, electronic publications, the Internet and other network resources)

8.1. Key literature references

No	Name according to bibliographic requirements	Number of	copies
		at the department	in the library
1	The system of legislative regulation of circulation of	electronic r	esource
	medicines: Textbook / M.A. Mishchenko, E.V.		
	Shalenkova, A.A. Ponomareva, N.N. Chesnokova,		
	S.V. Kononova. – Nizhny Novgorod, 2021. – 77 p.		
2	Fundamentals of state legislation on manufacturing of	electronic r	esource
	medicines: Textbook / M M.A. Mishchenko, E.V.		
	Shalenkova, A.A. Ponomareva, N.N. Chesnokova,		
	S.V. Kononova. – Nizhny Novgorod, 2021. – 56 p.		
3	Fundamentals of state legislation on pharmaceutical	electronic r	esource
	activities: Textbook / M.A. Mishchenko, E.V.		
	Shalenkova, A.A. Ponomareva, N.N. Chesnokova,		
	S.V. Kononova. – Nizhny Novgorod, 2021. – 50 p.		
4	The concept of good practices in the pharmaceutical	electronic resource	
	regulatory system: Textbook / M.A. Mishchenko,		
	E.V. Shalenkova, A.A. Ponomareva, N.N.		
	Chesnokova, S.V. Kononova. – Nizhny Novgorod,		
	2021. – 57 p.		
5	Fundamentals of pharmaceutical economics:	electronic r	esource
	Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A.		
	Ponomareva, N.N. Chesnokova, S.V. Kononova. –		
	Nizhny Novgorod, 2021. – 125 p.		
6	Prices and pricing in the pharmaceutical market:	electronic r	esource
	Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A.		
	Ponomareva, N.N. Chesnokova, S.V. Kononova. –		
	Nizhny Novgorod, 2021. – 77 p.		
7	Product policy of a pharmaceutical organization:	electronic r	esource
	Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A.		
	Ponomareva, N.N. Chesnokova, S.V. Kononova. –		
	Nizhny Novgorod, 2021. – 90 p.		

8	Fundamentals of planning economic indicators:	electronic resource
	Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A.	
	Ponomareva, N.N. Chesnokova, S.V. Kononova. –	
	Nizhny Novgorod, 2021. – 78 p.	
9	Planning of trade turnover of a pharmaceutical	electronic resource
	organization: Textbook / M.A. Mishchenko, E.V.	
	Shalenkova, A.A. Ponomareva, N.N. Chesnokova,	
	S.V. Kononova. – Nizhny Novgorod, 2021. – 78 p.	
10	Planning of distribution costs of a pharmaceutical	electronic resource
	organization: Textbook / M.A. Mishchenko, E.V.	
	Shalenkova, A.A. Ponomareva, N.N. Chesnokova,	
	S.V. Kononova. – Nizhny Novgorod, 2021. – 60 p.	
11	Income and profit planning of a pharmaceutical	electronic resource
	organization: Textbook / M.A. Mishchenko, E.V.	
	Shalenkova, A.A. Ponomareva, N.N. Chesnokova,	
	S.V. Kononova. – Nizhny Novgorod, 2021. – 70 p.	
12	Accounting of financial and economic activities of a	electronic resource
	pharmacy organization: Textbook / M.A.	
	Mishchenko, S.V. Kononova, N.N. Chesnokova, A.A.	
	Ponomareva, E.V. Shalenkova. – Nizhny Novgorod,	
	2022. – 74 p.	
13	Specific issues of accounting for the property of a	electronic resource
	pharmacy organization: Textbook / M.A.	
	Mishchenko. – Nizhny Novgorod, 2022. – 50 p.	
14	Basic principles of accounting of settlements with the	electronic resource
	personnel of a pharmacy organization: Textbook /	
	M.A. Mishchenko. – Nizhny Novgorod, 2022. – 50 p.	
15	The tax concept and tax management of	electronic resource
	pharmaceutical organizations: Textbook / M.A.	
	Mishchenko. – Nizhny Novgorod, 2022. – 52 p.	

### 8.2. Further reading

No	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1	The medicine lifecycle concept: Textbook / M.A.	electronic re	esource
	Mishchenko, S.V. Kononova, A.A Ponomareva. –		
	Nizhny Novgorod, 2020. – 80 p.		
2	Information technologies in the medicine lifecycle	electronic re	esource
	management: Textbook / M.A. Mishchenko, S.V.		
	Kononova, A.A Ponomareva. – Nizhny Novgorod,		
	2020. – 99 p.		
3	Evaluating the quality of pharmaceutical information:	electronic resource	
	Textbook / M.A. Mishchenko, S.V. Kononova, A.A		
	Ponomareva. – Nizhny Novgorod, 2020. – 98 p.		
4	Analysis and processing of pharmaceutical	electronic re	esource
	information: Textbook / M.A. Mishchenko, S.V.		
	Kononova, A.A Ponomareva. – Nizhny Novgorod,		
	2020. – 95 p.		
5	Post-marketing evaluation of medicinal products –	electronic re	esource
	pharmacoepidemiology: Textbook / M.A.		
	Mishchenko, S.V. Kononova, A.A Ponomareva. –		

	Nizhny Novgorod, 2020. – 53 p.	
6	Post-marketing evaluation of the medicinal products –	electronic resource
	pharmacoeconomics: Textbook / M.A. Mishchenko,	
	S.V. Kononova, A.A Ponomareva. – Nizhny	
	Novgorod, 2020. – 107 p.	
7	Post-marketing evaluation of medicinal products –	electronic resource
	pharmacovigilance: Textbook / M.A. Mishchenko,	
	S.V. Kononova, A.A Ponomareva. – Nizhny	
	Novgorod, 2020. – 70 p.	
8	Fundamentals of the state regulation of	electronic resource
	pharmaceutical information that is advertising:	
	Textbook / M.A. Mishchenko, S.V. Kononova, A.A	
	Ponomareva. – Nizhny Novgorod, 2020. – 109 p.	

## 8.3. Electronic educational resources for teaching academic subjects 8.3.1. Internal Electronic Library System of the University (IELSU)

No	Name of the electronic resource	Brief description (content)	Access conditions	Number of users
1	Internal electronic library	Works of university	From any	Not limited
	system (IELS)	teaching staff: textbooks,	computer and	
	http://nbk.pimunn.net/M	manuals, collections of	mobile device	
	egaPro/Web	tasks, teaching aids,	with individual	
		laboratory works,	login and	
		monographs, collections	password.	
		of scientific works,	Access mode:	
		scientific articles,	http://nbk.pimun	
		dissertations, abstracts of	n.net/MegaPro/	
		dissertations, patents	Web	

8.3.2. Electronic educational resources acquired by the University

No	Name of the electronic resource	Brief description (content)	Access conditions	Number of users
1	Electronic legal reference system "Consultant Plus" (contract for free) http://www.consultant.ru	Regulatory documents regulating the activities of medical and pharmaceutical institutions From the scientific library computers	Access mode: http://www.cons ultant.ru/	Not limited  Term of validity: Unlimited

8.3.3 Open access resources

№	Name of the electronic	Brief description (content)	Access conditions
	resource		
1	PubMed	US National Library of	From any computer and
	https://www.ncbi.nlm.nihgov	Medicine search engine for	mobile device.
	/pubmed	Medline, PreMedline	Access mode:
		databases	https://www.ncbi.nlm.nihgov
			/pubmed
			Not limited

2	Scopus database	International abstract	Access mode:
	www.scopus.com	database of scientific citation	www.scopus.com
		From university computers,	Not limited
		from any computer by	
		individual login and	
		password	
3	Web of Science Core	International abstract	Access mode:
	Collection	database of scientific	https://www.webofscience.co
	https://www.webofscience.co	citation. From university	m
	m	computers, from any	Not limited
		computer by individual login	
		and password.	

#### 9. Material and technical support for mastering an academic discipline

- 9.1. List of premises for classroom activities for the discipline
- 1. Classes for lectures and practical classes, equipped with multimedia and other means of training, allowing the use of simulation technologies, with standard sets of professional models (sets of protocols of clinical trials, formulary lists of LPU, price lists of distribution companies, sets of quality of life questionnaires), allowing students to master the skills and abilities, provided by professional activity, individually.
- 2. Simulation center "Educational pharmacy", equipped with simulation technics, which imitates the activity of pharmacy and its subdivisions (acceptance of goods, storage of goods, dispensing, pharmaceutical expertise of receipt) in the amount that allows students to master skills, provided by professional activity individually.
- 3. Rooms for students' independent work, equipped with computers with the ability to connect to the Internet and access to the electronic information and educational environment of the University.2.
  - 9.2. List of equipment for classroom activities for the discipline
  - 1. Multimedia complex (laptop, projector, screen, TV)
  - 2. Computer class (15 computers) with installed applications and Internet access.
  - 9.3. List of software
  - 1. Online event platform "Webinar"
  - 2. Yandex Browser
  - 3. Reference system "Consultant Plus"

#### 9.3. A set of licensed and freely distributed software, including domestic production

Ite m no.	Software	number of licenses	Type of software	Manufacture r	Number in the unified register of Russian software	Contract No. and date
1	Wtware	100	Thin Client Operating System	Kovalev Andrey Alexandrovic h	1960	2471/05-18 from 28.05.2018
2	MyOffice is Standard. A corporate user	220	Office Application	LLC "NEW CLOUD TECHNOLO	283	without limitation, with the right

	license for educational organizations, with no expiration date, with the right to receive updates for 1 year.			GIES"		to receive updates for 1 year.
3	LibreOffice		Office Application	The Document Foundation	Freely distributed software	
4	Windows 10 Education	700	Operating systems	Microsoft	Azure Dev Tools for Teaching Subscriptio n	
5	Yandex. Browser		Browser	«Yandex»	3722	
6	Subscription to MS Office Pro for 170 PCs for FGBOU VO "PIMU" of the Ministry of Health of Russia	170	Office Application	Microsoft		23618/HN100 30 LLC "Softline Trade" from 04.12.2020

#### 10. List of changes to the working program (to be filled out by the template)

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation
(FSBEI HE "PRMU" of the Ministry of Health of Russia)

## Department of *Name of the department*

#### **CHANGE REGISTRATION SHEET**

### working program for the academic discipline NAME OF THE ACADEMIC DISCIPLINE

	NA)	ME OF THE ACADEMIC DISCIPL	LINE	
	g profile:	entific specialty:e) - for master's degree programs	 (code, na 	ame)
Mode of	f study:			
		full-time/mixed attendance mode/extramura	ıl	
Position	Number and name of the program section	Contents of the changes made	Effective date of the changes	Contributor's signature
1	are program section		are changes	Signature
	ed at the department n			
	l Noof	20		
01	the Department	/		
departr	ment name, academic title	signature	print name	;