

MINISTRY OF HEALTH OF UKRAINE
DANYLO HALYTSKY LVIV NATIONAL MEDICAL UNIVERSITY

Department of organization and economics of pharmacy

APPROVED BY

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«___» _____ 20__

EDUCATIONAL PROGRAM OF THE DISCIPLINE

INTRODUCTORY PRACTICE

THE ORGANIZATION AND ECONOMICS OF PHARMACY

(name of discipline)

**Of specialists' training for the second (master's) level of higher education
22 field of knowledge "Healthcare"
226 specialty "Pharmacy"**

Discussed and approved
on meeting of the Department of
Organization and Economics of
Pharmacy
Protocol number ____
On _____, 20__
Head of the Department
_____prof. B.P.Hromovyk

Approved by
profiled methodical commission
on pharmaceutical sciences
Protocol number ____
On _____, 20__
Head of the profile methodical commission
_____ assoc. prof. S.B.Bilous

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INTRODUCTION

Educational program of the discipline

Introductory practice The organization and economics of pharmacy according to the second higher education (master's level)

22 field of knowledge "Healthcare"

226 specialty "Pharmacy"

Educational Program Master of Pharmacy

Description of discipline (abstract): Introductory practice organization and economics of pharmacy as an academic discipline studies the basic principles of the organization of pharmacies to ensure public and health care institutions of medicines and medical products.

The structure of the discipline	Total		Year / semester	Control
	Weeks	Credits, hours		
Name of the discipline: Introductory practice organization and economics of pharmacy	1 week	1,5 credits / 45 hours	1 course (2 semester)	<i>Differentiated test</i>

The subject of study of the discipline is to organize the pharmaceutical supply of the population.

Interdisciplinary connections: Study of the practice of pharmacy and the economy is an important element in the training of pharmacists. It integrates with the subjects taught under the curriculum, ethics and deontology in pharmacy technology of medications, organization and economy of pharmacy, management and marketing in pharmacy, medical and pharmaceutical commodity research, pharmaceutical law, social pharmacy.

1. The purpose and objectives of discipline

1.1. The goal of teaching "Introductory practice The organization and economics of pharmacy" is to develop in students the knowledge and skills of professionally important basic principles of the organization of the pharmacy.

1.2. The main objectives of the discipline "Introductory practice The organization and economics of pharmacy" is acquaintance with the basics of the legal status of pharmacy, pharmacy tasks and functions and its organizational structure; order placement, equipment and pharmacy premises equipment; the main stages of circulation of medicines in the pharmacy; jobs, full-time positions range of pharmacies and their functional responsibilities; requirements imposed on health regime pharmacies and personal care staff.

1.3 Competencies and learning outcomes, which promotes the formation of discipline (relationship with the normative content of training seekers of higher education, formulated in terms of learning outcomes in higher education).

According to the requirements of higher education the discipline provides students' by competencies:

- *General:*

1. The ability to act socially responsible and consciously.
2. Ability to apply knowledge in practical situations.
4. The capacity for abstract thinking, analysis and synthesis. The ability to learn and acquire modern knowledge.
6. Knowledge and understanding of the subject area and understanding of the profession.
7. The ability to adapt and actions in the new situation.
8. The ability to communicate in their native language both orally and in writing, the ability to communicate in a second language.
10. The ability to communicate with other professional groups at different levels (with experts from other disciplines / economic activities), the ability to work in a team.

- *special (professional, substantive):*

КФ 1. The ability to use professional knowledge of legal, legislative acts of Ukraine and recommendations of appropriate pharmaceutical practices.

KФ 6. The ability to organize the activities of pharmacies to ensure public, health care institutions with drugs, parafarmaceutics, goods of medical purpose and medical perfumes and cosmetics according to the National drug policy, Good pharmacy practice and other organizational and legal norms of the pharmaceutical legislation.

Detailing competencies according to the NLC descriptors in the form of "Matrix of competencies."

The matrix of competencies

№	Competence	Knowledge	Skill	Communication	Autonomy and responsibility
K3 1	Ability to act socially responsibly and consciously	Know your social and civic rights and responsibilities	To form their civil consciousness, to be able to act accordingly	The ability to make their public and social position	Bear responsibility for their civic position and activity
K3 2	Ability to apply knowledge in practical situations	Know methods implementation knowledge in addressing practical issues	To be able to use professional knowledge to solve practical situations	establish links from subjects practical activity.	Be responsible for the timeliness the decisions
K3 4	The capacity for abstract thinking, analysis and synthesis. The ability to learn and acquire modern knowledge	To know the current trends in the industry and analyze	To be able to analyze professional information, make informed decisions, acquire modern knowledge	Establish appropriate relationships to achieve goals.	Be responsible for the timely acquisition of modern knowledge.
K3 6	Knowledge and understanding of the subject area and understanding of the profession.	Knowing the structure and characteristics of professional activity.	To be able to carry out professional activities that require updating and integration of knowledge	To form a communication strategy in professional activities.	Be responsible for the professional development of high level of autonomy
K3 8	The ability to communicate in their native language both orally and in writing, the ability to communicate in a second language.	To have a perfect knowledge of the native language and basic knowledge foreign language	Be able to apply knowledge native language, both oral and written, be able to communicate in a foreign language	Use at professional and business communication and preparation of documents mother language. Use foreign language in professional activity	Be responsible for fluency in their native language, the development of professional knowledge
K3 10	The ability to communicate with other professional groups at different levels (with experts from other disciplines	Know Tactics and Strategy communication, laws and ways of communication	To be able to choose the ways and communication strategies for effective	Use communication strategies and skills of interpersonal interaction	Be responsible for the choice of tactics and methods of communication

	/ economic activities), the ability to work in a team	behavior.	teamwork		
KΦ 1	The ability to use professional knowledge of legal, legislative acts of Ukraine and recommendations of appropriate pharmaceutical practices	Know the legal and ethical pharmaceutical business.	Forming relationships with patients and doctors with a view implementation of ethical criteria WHO and the principles of good pharmacy practices to promote drugs on market, minimizing abuse and misuse drugs.	To form conclusions and professionally applied laws and regulations documents	Be responsible for the quality and timely use regulations in a professional Business
KΦ 6.	The ability to organize the activities of pharmacies to ensure public, health care institutions with drugs, parafarmaceutics, goods of medical purpose and medical perfumes and cosmetics according to the National drug policy, Good pharmacy practice and other organizational and legal norms of the pharmaceutical legislation.	Know: orders MOH Ukraine on the principles of operation of pharmacies and their structural units; development planning and deployment pharmacy network; orders and instructional materials Ministry of Health of Ukraine on information and technical support jobs pharmacists; tasks, functions, staffing structural units	-	Organize activities to ensure public pharmacy medicines and pharmaceutical products range	Be responsible for the fulfillment of good pharmacy practice

Results of studies:

- carry out professional activities in social interaction based on humanist and ethical principles; identify future professional activity as a socially important for human health (K3 1).

- Use knowledge of general and specialized courses in professional activities (K3 2).
- Demonstrate the ability to independently search, analysis and synthesis of information from various sources and use these results to solve typical problems of professional activity (K3 4).
- reason information to make decisions, take responsibility for them in standard and custom professional situations; adhere to the principles of ethics and ethics in professional activity (K3 6).
- carry out professional work, using creative methods and approaches (K3 7).
- Provide professional communication in modern Ukrainian literary language (K3 8).
- comply with communication professional interaction with colleagues, leadership, customers, work effectively in a team (K3 10).
- plan and implement professional activities on the basis of regulations and guidelines Ukraine appropriate pharmaceutical practices (KΦ 1).
- carry out complex organizational and administrative measures to ensure public health and health and other of medicines. range of pharmaceutical products (KΦ 6).

Integrative final program learning outcomes, which promotes the formation of academic discipline: the ability to solve common and complex specialized tasks and practical problems in professional activities using pharmaceutical regulations, theories and methods of basic social and economic sciences; integrate knowledge and handle complexity, formulate judgments with incomplete or limited information; clearly and unambiguously communicate their findings and knowledge rationale underpinning these, to professional and non professional audience.

2. Information scope of the discipline

In studying the discipline is given 1.5 ECTS credits - 45 hours.

3. The structure of the discipline

Content of practice

Getting to the pharmacy premises and their equipment. The plan pharmacy premises. The list of staff positions pharmacy. Some parts of pharmacies and their functions. The concept of manufacturing drugs in terms pharmacies. The requirements of the sanitary regime for personal hygiene pharmacy workers. Health regulations pharmacy staff. Familiarity with the requirements for sanitary cleaning mode pharmacies. Participation in the wet cleaning of production facilities with the use of detergents and disinfectants. Preparation of labor saving tools, used in the manufacture of drugs in pharmacies. Washing of pharmaceutical glassware, rubber processing, plastic, plastic corks, aluminum caps. Quality assessment of pharmaceutical processing utensils and Cork. Safety in pharmacy. Protecting jobs and protective clothes pharmacy staff.

Plan of practice organization and economics of pharmacy

№	Topic	Days
1.	General familiarity with the work of pharmacy. Passage of labor protection at the pharmacy.	1
2.	Summary of basic information about pharmacy: location, operation, ownership, volume of sales, structural units and their deployment, space, state pharmacies.	1
3.	Study requirements for frequency of cleaning equipment and the equipment pharmacy. Participation in the cleaning of rooms and equipment.	1
4.	Summary of requirements for personal hygiene pharmacy workers. Washing and quality control of pharmaceutical processing utensils. Conditions of sterilization individual objects.	1
5.	Making the results of practice. Differentiated test.	1
Total		5

4. Thematic plan of lectures – unplanned work curriculum for the academic year

5. Thematic plan of practical classes

The list of practical skills that students should acquire during practice

№	Name	Evaluation in points
1.	Play the main provisions of instructions on labor safety for the employee who starts to work at the pharmacy.	«5» - 5 points «4» - 4 points «3» - 3 points «2» - 0 points
2.	Describe the premises pharmacy, manufacturing and non-productive.	- « « -
3.	Conduct a brief description of the pharmacy personnel.	- « « -
4.	Summarize requirements of instructions for sanitary-epidemiological regime to premises and equipment of pharmacies.	- « « -
5.	Tell about general hygiene requirements for cleaning, care of equipment of pharmacies.	- « « -
6.	Perform wet cleaning and disinfection of individual objects (floors, walls, doors, windows, equipment) using containers "1" and "2".	- « « -
7.	Inquire requirements for personal care personnel of pharmacies that do not carry out production (manufacturing) drugs.	- « « -
8.	Summarize requirements of instructions for sanitary-epidemiological regime to premises and equipment involved in the production of medicines in pharmacy conditions.	- « « -
9.	Inquire sequence of stages general cleaning of aseptic unit.	- « « -
10.	Inquire requirements of sanitary regime to workers involved in manufacturing of drugs in the pharmaceutical environment.	- « « -
11.	Prepare supporting materials required for the manufacture and packaging of drugs.	- « « -
12.	Perform cleaning and handling facilities of small mechanization, buret systems, spatulas, scales, mortars and other small pharmaceutical equipment.	- « « -
13.	Perform sterilization of individual objects.	- « « -
14.	Perform washing of new pharmacy dishes.	- « « -
15.	Perform decontamination and cleaning of dishes that were in use in infectious sections.	- « « -
16.	Perform sterilization of pharmaceutical dishes and control temperature	- « « -

	conditions of air sterilizer.	
17.	Implement review and rejection of rubber stoppers for corking bottles.	- « « -
18.	Perform the processing of new rubber stoppers for corking bottles	- « « -
19.	Perform processing of aluminum caps that are used together with rubber stoppers in the sealing of vials and bottles	- « « -
20.	Perform the processing of rubber stoppers that were in use.	- « « -
21.	Perform the processing of new plastic corks.	- « « -
22.	To process plastic screw corks.	- « « -
23.	Perform determining the purity of pharmaceutical washed dishes.	- « « -
24.	Perform determining of completeness flushing of detergents.	- « « -

6. Thematic plan of independent work of students – unplanned work curriculum for the academic year.

7. Individual tasks - unplanned work curriculum for the academic year.

8. Teaching methods. In studying the subject "Study of the practice of pharmacy and the economy", the following teaching methods:

- the type of cognitive activity: explanatory illustration; analytical, synthetic, inductive, deductive;
- the main stages of the process: building knowledge; application of knowledge; generalization; formation of skills; fixing; audit;
- on a systems approach, incentives and motivation; control and self-control.
- for the sources of knowledge: verbal - the story, conversation; visual - demonstration, illustration.
- the level of individual mental activity: the problem; partly retrieval; exploratory.

9. Methods of control:

- Types of control (current and final)
- Shape final control according to the curriculum, differentiated test
- Evaluation criteria

Evaluation criteria mastering practical skills

Rating	Implementation
«5» (5 points)	Student closely linking theory with practice and properly demonstrate of practical skills, completely fulfilled the tasks envisaged program practice; followed pharmacy operating in work rules and safety regulations, all types of work, production and operations tasks under the program practices made in good faith, in full, all kinds of work performed recorded in his diary
«4» (4 points)	Student shows of practical skills, performed all the tasks under the program of practice-too minor errors; followed pharmacy operating in work rules and safety regulations, all types of work, production and operations tasks under the program practices performed well, but not enough good faith, incomplete, types of work performed does not fully or with some errors recorded in his diary
«3» (3 points)	student in the practical demonstration pavychok making significant errors, performs only the easiest task, has only a mandatory minimum research methods fully completed the task envisaged program practice; raised operating the pharmacy work rules and safety, jobs, manufacturing operations and tasks

	envisaged program practice not implemented completely and correctly, the types of work performed is not full, and some totally uncommitted diary
«2» (0 points)	student during a demonstration of practical skills make significant, serious errors; not completed the task envisaged program practice; grossly violated operating the pharmacy work rules and safety, jobs, manufacturing operations and tasks under the program practices are not implemented or performed with unacceptable errors, the types of work performed does not fully or completely uncommitted diary or student diary practice there is no .

10. Current monitored daily, according to the specific goals of each topic, supervisor of base practices that vises of practical skills in the diary practice student. In the process of monitoring practical skills students are encouraged to apply these diagnostic tools of training: practical tasks, simulations, research, explanation and evaluation of their results.

10.1. Evaluation of current educational activity. In evaluating the mastering of each topic for current educational activity the student score for the 4-point scale (national). This takes into account all types of work, provided the program discipline. The student must obtain an assessment of each topic for further conversion of marks into balls by multi (200-point) scale.

11. The form of the final control of the success of training - the differentiated offset that is to evaluate mastering academic material of discipline on the basis of current controls and writing individual tests performed in the last session..

12. The scheme of calculation and distribution points that receive students:

The maximum number of points that a student can collect for current educational activity for admission to the differentiated credit is 120 points.

The minimum number of points that a student must collect for current educational activity for admission to the differentiated credit is 72 points.

The maximum number of points that a student can collect in the preparation of differentiated credit is 80.

The minimum score in the preparation of differentiated credit - at least 50.

Rating of discipline, which ends Differentiated test is defined as the sum of scores for current educational activity (at least 72) and points for a differential test (at least 50).

13. Methodical providing (educational content (questions for current and final control of knowledge and skills of students with learning dysts).

THE EXAMPLE OF DIARY FROM INTRODUCTORY PRACTICE (annex)

The list of issues to be considered at the final control

1. Define the pharmacy and its structural unit.
2. Organizational requirements of pharmacies.
3. The main functions of pharmacies and their structural units.
4. The premises of pharmacies.

5. Classification of pharmacies premises for production and non-production.
6. The list of positions pharmacists.
7. Requirements for specific areas of premises and equipment of pharmacies.
8. Sanitary requirements for pharmacy premises.
9. Requirements for material production equipment of pharmacies.
10. Requirements for equipment and furniture at the pharmacy.
11. Requirements for separate cleaning of rooms and objects in pharmacy.
12. Requirements for personal hygiene of pharmacies personnel not engaged in production (manufacturing) drugs.
13. Requirements for personal hygiene of pharmacies personnel engaged in the production (manufacturing) drugs.
14. Providing pharmacy staff technological clothes and footwear.
15. Passage of compulsory medical examination of workers of pharmacies.
16. Requirements for pharmacy premises in which the production (manufacturing) drugs.
17. The composition and requirements to accommodate aseptic pharmacy unit: building, windows, ventilation.
18. Marking equipment cleaning Pharmacy.
19. Marking sinks for washing dishes pharmacy.
20. Requirements for the materials used in the decoration of "clean" areas.
21. Conducting health day at the pharmacy.
22. Procedure for general cleaning aseptic unit.
23. Sterilization individual objects in pharmacy.
24. The chemical method of temperature modes of sterilizers.
25. The concept of chemical test formulations and chemical tests to monitor temperature conditions of steam and air sterilizers.
26. Thermal chemical indicators and compliance with the profile of sterilization.
27. Procedure for new pharmaceutical washing dishes.
28. The procedure for disinfecting and washing dishes pharmacy that was in use.
29. The procedure for processing rubber stoppers, aluminum caps, plastic and plastic screw plugs.
30. Quality control treatment pharmacy dishes and jams.

14. Recommended Books

Main (Basic)

1. On Approval of Regulations of sanitary-epidemiological regime pharmacies: MOH Ukraine from 15.05.2006. № 275. - Electronic resource. - Access: <http://zakon5.rada.gov.ua/laws/show/z0642-06..>

2. BP Hromovyk The organization and economics of pharmacy / BP Hromovyk, SI Tereshchuk, IL Chukhrai; Ed. prof. BP Hromovyka and Assoc. SI. Tereshchuk. - Ball: New Book, 2009. - 816 p.

Auxiliary

3. Workshop organization and economics of pharmacy: teach. manual for higher navch.zakl. / BP Hromovyk, SI Tereshchuk, AL Thunder and others. - Ball: New Book, 2004. - 448 p.

15. Information Resources

1. The legislation of Ukraine [electronic resource]. - Access: <http://zakon3.rada.gov.ua/laws>
2. Regulatory and legislative documents of the Ministry of Health of Ukraine [electronic resource]. - Access: / <http://mozdocs.kiev.ua>

Щоденник

з навчальної дисципліни

«Ознайомча практика з організації та економіки фармації»

студента (-ки) _____

I курсу фармацевтичного факультету, _____ групи

база практики _____

Керівник (від бази) _____

Керівник (від кафедри) _____

Терміни практики _____

Дата	№ з.п.	Перелік практичних навичок*	Бали	Підпис безпосереднього керівника практики від бази практики
	1			
	2			
	3			
	і т.д.			
		Сума балів за засвоєння практичних навичок (72 - 120 балів) **		
				Підпис керівника практики від кафедри
		Підсумковий контроль практичних навичок, диф. залік (50-80 балів)		
* Вказуючи у щоденнику певну навичку вперше, слід коротко описати техніку (методику) її проведення				
** Сума балів за засвоєння практичних навичок затверджується печаткою аптеки				

Оцінка за практику

Сума балів за:		Всього балів	Традиційна оцінка	Дата	Підпис викладача
виконання практичних навичок	підсумковий контроль				

Керівник практики від кафедри _____

(підпис) (прізвище та ініціали)