

**Medical and pharmaceutical commodity science
Syllabus of the discipline 2021-2022
for the specialty "Pharmacy"**

TEACHERS



**BARANOVA
Inna
Ivanivna**

e-mail: innabaranovapharm@ukr.net



**BEZPALA
Yuliia
Olexandrivna**

e – mail: yuliyabespalya5@gmail.com



**ZAPOROZHСКА
Svitlana
Mikolaivna**

e – mail: zsn2016@ukr.net

1. Name of higher education institution and department: National University of Pharmacy,, Department of Commodity Sciences .

2. Address: Kharkov, Valentinovskaya St. , 4; 4th floor , phone 0572-65-16-96.

3. Website: <http://tovaroved.nuph.edu.ua>

4. Information about Teaching Staff:

Baranova Inna Ivanivna

Doctor of Pharmaceutical Sciences, Head of the Department of Commodity Sciences of the National University of Pharmacy. Experience of scientific activity - 25 years, experience of scientific and pedagogical activity - 20 years. Teaches disciplines: "Medical and pharmaceutical Commodity Science", "Pharmaceutical and perfumery and cosmetic Commodity Science", "Medical Commodity Science", "Medical equipment in physical therapy". Research interests: commodity analysis of medical products, devices, apparatuses, cosmetics means and medicines.

Bezpala Yuliia Olexandrivna PhD (Pharmaceutical Sciences), Associate Professor of the Department of Commodity Sciences of the National University of Pharmacy. Experience of scientific activity - 9 years, experience of scientific and pedagogical activity - 7 years. Reads courses: "Medical and pharmaceutical Commodity Science", "Pharmaceutical and perfumery and cosmetic Commodity Science". Scientific interests: commodity analysis of medical products, devices, apparatus, cosmetics means and medicines.

Zaporozhska Svitlana Mikolaivna PhD (Pharmaceutical Sciences), Associate Professor of the Department of Commodity Sciences of the National University of Pharmacy. Experience of scientific activity - 17 years, experience of scientific and pedagogical activity - 15 years. Reads courses: "Medical and pharmaceutical Commodity Science", "Pharmaceutical and perfumery and cosmetic Commodity Science". Scientific interests: commodity analysis of medical products, devices, apparatus, cosmetics means and medicines.

5. The consultations : take place every Tuesday from 9.00 to 12.00 and every Thursday from 13.00 to 16.00 at the Department of Commodity Science according to the schedule.

6. Short annotation: The academic discipline : "Medical and pharmaceutical Commodity Science" refers to the cycle of the main disciplines of professionally oriented training of specialists for the second (master's) level in the specialty "226 Pharmacy, Industrial Pharmacy", the educational program "Pharmacy", which is intended for

applicants for higher day education (Phm (5.0 d)) and forms their knowledge and skills in the assortment of goods, technical requirements, the correct application of appropriate labeling, rules of acceptance and distribution in the storage areas of the incoming goods. Final control - credit.

7. The purpose of the discipline: there is the assimilation by applicants of higher education of the theoretical foundations and practical skills and abilities to conduct commodity analysis in the pharmacies, their structural subdivisions, warehouses; learning the rules of storage of finished drugs, medical items, medical devices and apparatuses, depending on the requirements of the regulatory documentation; mastering the knowledge about the characteristics, classification and assortment of finished drugs, medical products, medical devices and apparatuses; the study of factors affecting the quality of goods through the analysis of labeling and packaging which makes it possible to more fully realize the scientific and creative potential of future specialists.

8. The format of the course: lectures and practical classes for a better understanding of the topics.

9. Program results of studying :

As a result of studying the academic discipline, the applicant for education will be able to:

- To Carry out the professional activity in the social interaction based on
- humanistic and ethical principles; identify the future professional activity as
- socially significant for a human health.
- To Apply the knowledge of general and professional disciplines in the professional activity .
- To Adhere to the norms of sanitary and hygienic regime and safety requirements at
- carrying out professional activity.
- To Demonstrate the ability to independently search, analyze and synthesize the information from different sources and use these results to solve typical and complex
- specialized tasks of the professional activity.
- To Argue the information for decision-making, to be responsible for them in standard and non-standard professional situations; to adhere to the principles of deontology and ethics in the professional activity.
- To Carry out the professional activity using the information technology, "The Information databases", navigation systems, the Internet resources, software and others information and communication technologies.
- Adhere to the norms of communication in the professional interaction with colleagues, management, consumers, work effectively in a team.
- To Use the methods for assessing performance indicators; to detect reserves to increase the labor efficiency.
- To determine the advantages and disadvantages of drugs of different pharmacological groups taking into account their chemical, physicochemical, biopharmaceutical, pharmacokinetic and pharmacodynamic features. To Recommend over-the-counter medications to the consumers means and other products of the pharmacy range with the provision of advisory assistance and pharmaceutical care.
- To Provide home care to patients in the emergencies and victims in extreme situations.
- To Predict and determine the impact of environmental factors on quality medicines and consumer characteristics of other products of the pharmacy range under the storage time.
- To Implement a set of organizational and managerial measures to ensure population and health care facilities with medicines and other goods pharmacy range. Carry out all types of accounting in pharmacies, the administrative record keeping, the processes of commodity analysis.
- Plan and implement the professional activity on the basis of regulatory legal acts of Ukraine and the recommendations of good pharmaceutical practices
- To Organize and conduct the rational procurement of medicinal plants raw materials. To Develop and implement measures for the protection, reproduction and rational
- use of wild species of medicinal plants.
- To Ensure the quality control of medicines and document it results. To Manage the quality risks at the all stages of the life cycle medicines.

10. The scope of the discipline: 4,0 credits: 120 hours of classroom classes, from them - 8 hours of lectures, 53 hours - practical classes, 57 hours of independent work

11. Prerequisites of the course : "Medical and pharmaceutical Commodity Science"

12. Hardware and software: computer, multimedia device, screen.

13. Academic Discipline Policies: No form of violation of academic virtue is tolerated. In the event of such events, the response is in accordance with the provisions of the NUPh.

14 . The scheme of the discipline:

Date	Lectures	Materials of educational and methodical complex
1	2	3
7th semester		
Modul № 1		http://pharmel.kharkiv.edu/moodle/course/index.php?categoryid=178 ; http://tovaroved.nuph.edu.ua/?page_id=185&lang = uk
01.09.2021	The subject and tasks of medical and pharmaceutical commodity science. Basic concepts and terms. Objects and subjects of commodity analysis. Packaging and labelling of medical goods	
15.09.2021	Classification and Coding of goods.	
29.09.2021	Commodity analysis of rubbers goods and items of care of patients	
13.10.2021	Commodity analysis of instruments and devices for piercings, injections and transfusions.	
27.10.2021	Goods that have the right to purchase and sell pharmacy establishments and their structural subdivisions.	
10.11.2021	Containers for pharmaceutical application. Closures and modern package materials in pharmacy.	
24.11.2021	Packaging, labeling and transporting of drugs	
8.12.2021	Commodity analysis of medical device for inspection and diagnosis of the human body (sphygmomanometers, thermometers, stethoscopes)	

Date	Laboratory classes	Materials of educational and methodical complex
1	2	3
7 th semester		
THEMATIC MODULE 1. THEORETICAL BASES OF COMMODITY SCIENCE. CLASSIFICATION AND CODING OF GOODS. PACKING, MARKING OF MEDICAL GOODS .		<p>http://tovaroved.nuph.edu.ua/?page_id=185&lang=en;</p> <p>Medical and pharmaceutical commodity science : workshop / D. V. Demyanenko, V. G. Demyanenko. – Kharkiv : NUPh, 2012. – V. 1. – 257 p.</p> <p>Pharmaceutical and medical commodity science : workbook. / I. I. Baranova, D. V. Demyanenko, S.V. Breusova, S. N. Kovalenko, S. A. Mamedova. – Kharkiv : NUPh, 2018. – 52 p.</p> <p>Pharmaceutical and medical commodity science : workbook. / I. I. Baranova, D. V. Demyanenko, V. G. Demyanenko S.V. Breusova, S. N. Kovalenko, S. A. Mamedova. – Kharkiv : NUPh, 2018. – 67 p.</p> <p>Pharmaceutical and medical commodity science [Electronic resource] = [Фармацевтичне та медичне товарознавство] : methodological recommendations for preparation to the final module control [of applicants for higher education specialty "Pharmacy"] / I. I. Baranova [et al.] ; NUPh, Dep. of Commodity Science. - Electronic text data. - Kharkiv : NUPh , 2018. - 24 p. Access Mode a : http://irbis.nuph.edu.ua/full_text/2018/2018_Pharmaceutical%20and%20medical%20commodity%20science%20.pdf</p>
Modul № 1		
06.09.21 / 02.09.21	Packaging and labelling of medical goods	
09.09.21 / 13.09.21	Use of regulatory documentation for the commodity analysis of finished drugs and medical devices	
13.09.2021 / 16.09.21	Classification and Coding of goods.	
20.09.21 / 23.09.21	Commodity analysis of pharmaceutical and medical goods	
27.09.21 / 30.09.21	Commodity analysis of rubbers goods and items of care of patients	
04.10.21 / 07.10.21	Commodity analysis of instruments and devices for piercings, injections and transfusions.	
11.10.21 / 21.10.21	Commodity analysis of dressing materials and ready dressings means	
25.10.21 / 28.10.21	Commodity analysis of suture materials and piercing surgical needles Final module control of TM 1: Theoretical bases of commodity science. classification and coding of goods. packing, marking of medical goods .	
COMMODITY ANALYSIS OF MEDICINAL PRODUCTS. PACKAGING, LABELING OF MEDICINAL PRODUCTS		
Modul № 2		
1.11.21 / 04.11.21	Goods which chemist's shops and heir structural units have right of selling and buying	
8.11.21 / 11.11.21	Containers for pharmaceutical application. Closures and modern package materials in pharmacy	
15.11.21 / 18.11.21	Packaging, labeling and transporting of drugs	
22.11.21 / 25.11.21	Commodity analysis of medical device for inspection and diagnosis of the human body (sphygmomanometers, thermometers, stethoscopes)	
29.11.21 / 02.12.21	Commodity analysis of medical device for inspection and diagnosis of the human body (sphygmomanometers, thermometers, stethoscopes)	
6.12.21 / 09.12.21	Commodity analysis of nebulizers	
13.12.21 / 16.12.21	Commodity analysis of inhalers	
20.12.21 / 23.12.21	Acceptance of the goods on a chemist's warehouse. Organization of storage of medicines and medical devices. Final module control of TM 2: Commodity analysis of medicinal products. packaging, labeling of medicinal products	
10.01.22 / 13.01.22	Final module control	Guidelines for preparation for s MK http://tovaroved.nuph.edu.ua/?page_id=185&lang=uk
	Rating upgrade of the Final module control:	

15. Assessment system and requirements: assessment is carried out on a 100-point scale: current control - 1-3 points, Semantic module control - 4- 10 points, Final module control - 24-40 points. Forms of control: oral questioning, written answer to a theoretical question, situational or test assignment, computer testing. Credit - from 60 to 100 points.