

**Thematic plan of seminars  
in the discipline "Medical and pharmaceutical commodity science"  
for students of the educational program  
specialist in the specialty 33.05.01 Pharmacy,  
direction (profile) Pharmacy,  
full-time of study  
for the 2023-2024 academic year**

№	Thematic blocks	Hours (academic)
1.	Commodity science as a science. <sup>1</sup> Historical aspects. The subject and tasks of medical commodity science in the professional activity of a pharmacist. Theoretical foundations of medical and pharmaceutical commodity science. <sup>2</sup>	2
2.	Terminology. <sup>1</sup> Definition of basic terms and concepts. <sup>2</sup>	1
3.	The use value of the product. <sup>1</sup> The usefulness of pharmaceutical products. Use and exchange values.	1
4.	Consumer properties of medical and pharmaceutical products. <sup>1</sup> Consumer properties that determine the quality of medical and pharmaceutical products. <sup>2</sup>	2
5.	Factors influencing the formation and preservation of consumer properties of medical and pharmaceutical products. <sup>1</sup> Factors shaping the quality and quantity of consumer properties of medical and pharmaceutical products. Factors affecting the preservation of consumer properties of goods in the process of their circulation and operation.	2
6.	Classification of goods. <sup>1</sup> Basic definitions, concepts. The purpose of classification. Characteristics of classification features. <sup>2</sup>	1
7.	System, classification methods. <sup>1</sup> Classification coding methods. Hierarchical and faceted classification methods. <sup>2</sup>	2
8.	Classifiers of products and goods. <sup>1</sup> Classifiers used in commodity research. Types of classification in commodity science. Commodity classification of medical and pharmaceutical products. <sup>2</sup>	2
9.	Trade information media. <sup>1</sup> General requirements, characteristics. Bar coding of medical products. <sup>2</sup>	1
10.	Characteristics of groups of medical and pharmaceutical products. <sup>1</sup> General characteristics of assortment groups of goods in pharmacy organizations: medicines, medical devices, disinfectants, personal hygiene items and products, tableware for medical purposes, items and products intended for the care of patients, newborns and children under the age of three years, eyeglass optics and its care products, mineral waters, medical, children's and dietary nutrition products, biologically active additives, perfumes and cosmetics, medical and sanitary educational printed publications, designed to promote a healthy lifestyle. <sup>2</sup>	1
11.	The use value and quality of pharmaceutical and medical products. <sup>1</sup> Quality as a philosophical category. Quality of medical products: concept, definition. The relationship of use value with the quality of the goods.	1
12.	The quality of medical and pharmaceutical products and its properties. <sup>1</sup> Quality indicators. Requirements for medical and pharmaceutical products. <sup>2</sup>	1
13.	Quality assurance at the stages of the "life cycle" of medicines and medical products. <sup>1</sup> Technical regulation, licensing of production and circulation of medical products. The state system of standardization and certification of medical and pharmaceutical products. <sup>2</sup> State registration of medicines. Introduction of medicines into civil circulation in the Russian Federation.	1
14.	Standards. Regulatory documentation. Types of standards and regulatory documentation. <sup>1</sup> Regulatory documentation for medicines. Methods of product quality control. Methods for assessing the quality of medical devices. <sup>2</sup>	2
15.	Final control work No. 1: "Fundamentals of medical and pharmaceutical	1

	commodity science" on topics 1-14	
16.	Fundamentals of materials science and manufacturing technology from the point of view of the formation of the use value and quality of the goods. <sup>1</sup> Materials science. Classification, properties, requirements for materials for medical devices. <sup>2</sup>	2
17.	Metal materials. Metals and their alloys. <sup>1</sup> Types of alloys.	1
18.	Ferrous metals. Steel and cast iron. Marking. <sup>2</sup>	1
19.	Non-ferrous metals and their alloys. Precision alloys. <sup>1,2</sup>	1
20.	Methods of production of medical products from metals. <sup>1</sup> The concept of the technological process. <sup>2</sup>	1
21.	Corrosion and anticorrosive protection. <sup>1</sup> Methods of protection from environmental factors to preserve the consumer properties and quality of medical and pharmaceutical products. <sup>2</sup> Types of corrosion. Characteristics of anticorrosive protection methods. <sup>2</sup>	1
22.	Non-metallic materials. <sup>1</sup> Types, general characteristics. Marking of materials. <sup>2</sup>	1
23.	Glass and ceramic materials used in the manufacture of medical devices. <sup>1</sup> Technological process of production of glass products. <sup>2</sup>	1
24.	Polymer materials. Concept, classification and application. <sup>1</sup> Rubbers and rubbers. Technological process of production of rubber products. <sup>2</sup>	1
25.	Plastic masses. Types, advantages, disadvantages. <sup>1</sup> Thermoplastic and thermosetting materials. Methods of manufacturing plastic products. <sup>2</sup>	2
26.	Factors that preserve the consumer properties and quality of medical and pharmaceutical products. <sup>1</sup> Classification and basic requirements for packaging. The main elements of the packaging. Environmental aspects of packaging. <sup>2</sup>	2
27.	Indicators of packaging quality (functional, ergonomic, aesthetic). <sup>1</sup> Requirements for packaging materials and closures. <sup>2</sup>	1
28.	Containers and packaging materials. <sup>1</sup> General characteristics. Classification. <sup>2</sup>	1
29.	Labeling of medicines. <sup>1</sup> General and specific requirements for labeling of medicines. <sup>2</sup>	2
30.	Storage and transportation of medicines. <sup>1</sup> General requirements for the storage and transportation (transportation) of medicines. <sup>2</sup>	2
31.	Final control work No. 2: "Use value and quality of medical and pharmaceutical products" on topics 16-30	1
32.	Commodity analysis of medical and pharmaceutical products. <sup>1</sup> Commodity analysis, its functions, goals and objectives. Features of commodity analysis of medical and pharmaceutical products. Commodity analysis and commodity expertise. <sup>2</sup>	2
33.	Acceptance of medical and pharmaceutical goods: general provisions. <sup>1</sup> Acceptance of goods by quantity and quality. <sup>2</sup>	1
34.	The procedure for registration and conclusion of contracts and contracts with suppliers. Movement of goods, sales, special conditions for the supply of medical products, claims. <sup>1,2</sup>	2
35.	Commodity analysis of medicines. <sup>1</sup> Main stages, methods of conducting. Registration of the results of commodity analysis. <sup>2</sup>	2
36.	Commodity analysis of dressings and articles made of them, objects and means intended for the care of patients, newborns and children under the age of three years. <sup>1</sup> Main stages, methods of conducting. Registration of the results of commodity analysis. <sup>2</sup>	1
37.	Commodity analysis of medical products, personal hygiene items and means, sanitary and hygienic products, eyeglass optics, mineral waters. <sup>1</sup> Main stages, methods of conducting. Registration of the results of commodity analysis. <sup>2</sup>	2
38.	Commodity analysis of specialized food products - products of medical, baby and dietary nutrition, biologically active additives, perfumery and cosmetic products, disinfectants. <sup>1</sup> Main stages, methods of conducting. Registration of the results of commodity analysis. <sup>2</sup>	1

	Control semester testing	1
	Intermediate certification	2
	<b>Total</b>	<b>56</b>

-Subject

<sup>2</sup> - essential content

Considered at the meeting of the department of Management and Economics of Pharmacy,  
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Head of the Department,

Doctor of Pharmacy



L.M. Ganicheva