

The syllabus of the discipline Pharmaceutical management and marketing

1. General information			
The name of the faculty	pharmaceutical		
Educational program (branch, specialty, level of higher education, form of education)	22 Healthcare, 226 Pharmacy, industrial pharmacy, second (master's) level of higher education, full-time		
Academic year	2023-2024 y.		
Name of discipline, code (e-mail address on the website of Danylo Halytsky LNMU)	Pharmaceutical Management and Marketing OK 32		
Department (name, address, phone, e-mail)	Department of Organization and Economics of Pharmacy, Lviv, Pekarska str., 69 (032) 2768639 <u>Kaf_organizationpharm@meduniv.lviv.ua</u>		
Head of the department (contact e-mail)	Head of the Department: Doctor of Pharmaceutical Sciences Professor Hromovyk B.P. hromovyk@gmail.com		
Year of study (year in which the study of the discipline)	4,5		
Semester (semester in which the study of the discipline is implemented)	VII - IX семестри		
Type of course / module (obligatory / optional)	obligatory		
Teachers (names, surnames, scientific degrees and titles of teachers who teach the discipline, contact e-mail)	Dorykevych Kateryna, PhD of Pharmaceutical Sciences, Associate Professor, kpushak@gmail.com		
Erasmus yes / no	No		

(availability of the discipline for students within the Erasmus + program)	
Person responsible for the syllabus (person to be commented on the syllabus, contact e- mail)	Levytska Oksana, Doctor of Pharmaceutical Sciences, Associate Professor, levytska.oksana@gmail.com
Number of ECTS credits	9 creditsB / 270 h.
Number of hours	Total: 270, incl. lectures - 38 hours, practical classes - 100 hours, Independent student's work - 132 hours)
Language of teaching	Ukrainian, English
Information about consultations	According to the schedule of the department
Address, telephone and regulations of the clinical base, office (if necessary)	-
	2 Short annotation to the course

2. Short annotation to the course

General characteristics, brief description of the course, features, benefits

Description of the discipline (abstract)

Pharmaceutical management and marketing is one of the final components in a set of professionally-oriented disciplines that form masters of pharmacy. It enables the formation of modern pharmaceutical and market thinking in applicants for higher pharmaceutical education.

The subject of study of the discipline are the laws, principles of formation, operation and development of the management system of the pharmaceutical organization, as well as marketing philosophy and management methods in a competitive environment.

3. The purpose and objectives of the course

3.1. The purpose of teaching the discipline "Pharmaceutical Management and Marketing" is to provide applicants for higher pharmaceutical education with a set of professional competencies to create a holistic system of successful management of the pharmaceutical organization, including necessary for effective marketing activities.

3.2.The main tasks of studying the discipline "Pharmaceutical Management and Marketing" are:

- formation of professional knowledge, skills and ideas of higher pharmaceutical education in creating a holistic, effective and flexible management system of the pharmaceutical organization in a constantly changing market environment;
- providing a theoretical basis for the study of other disciplines of the curriculum;
- creation of an educational base that determines the professional competence and general erudition of the Master of Pharmacy.
- 3.3 Competences and learning outcomes, the formation of which is facilitated by the discipline (relationship with the normative content of training of higher education, formulated in terms of learning

outcomes in the Standard of Higher Education).

In accordance with the requirements of the Standard of Higher Education, the discipline provides students with the acquisition of competencies:

- a) general competencies (GC):
- GC 1. Ability to act socially responsible and civic conscious.
- GC 2. Ability to apply knowledge in practical situations.
- GC 4. Ability to abstract thinking, analysis and synthesis, to learn and be modernly trained.
- GC 5. Ability to show initiative and entrepreneurship.
- GC 6. Knowledge and understanding of the subject area and understanding of professional activity.
- GC 7. Ability to adapt and act in a new situation.
- GC 8. Ability to communicate in the state language both orally and in writing, ability to communicate in a foreign language (mainly English) at a level that ensures effective professional activity.
- GC 9. Skills in the use of information and communication technologies.
- GC 10. Ability to choose communication strategy, ability to work in a team and with experts from other fields of knowledge / types of economic activity.
- GC 11. Ability to assess and ensure the quality of work performed.
- b) special (professional) competencies (SC):
- SC 10. Ability to develop, implement and apply management approaches in the professional activities of pharmacies, wholesalers, manufacturing companies and other pharmaceutical organizations, to argue the principles of HR-management and self-management, to demonstrate leadership skills.
- SC 12. Ability to use in professional activities knowledge of regulations, legislation of Ukraine and recommendations of good pharmaceutical practices.
- SC 13. Ability to demonstrate and apply in practice communication skills, fundamental principles of pharmaceutical ethics and deontology, based on moral obligations and values, ethical standards of professional conduct and responsibility in accordance with the Code of Ethics for Pharmaceutical Workers of Ukraine and WHO guidelines.
- SC 17. Ability to organize and carry out general and marketing management of assortment, commodity-innovative, pricing, sales and communication policies of pharmaceutical market entities based on the results of marketing research and taking into account market processes in national and international markets, risk management in the pharmaceutical system.

4. Prerequisites of the course

Pharmaceutical management and marketing completes a set of specialized disciplines that form masters of pharmacy. Study of the discipline:

- 1. Based on general knowledge of such disciplines as "Philosophy and Bioethics", "Ethics and Deontology in Pharmacy", "Information Technology in Pharmacy", "Pharmaceutical Law and Legislation", "Organization and Economics in Pharmacy".
- 2. Lays the foundations for the study of higher pharmaceutical education by such disciplines as "Medical and Pharmaceutical Commodity", "Pharmacoeconomics", "Occupational Safety" and "Good Practice in Pharmacy", which provides for the integration of teaching with these disciplines to develop skills to apply knowledge of pharmaceutical management and marketing in the process of further training and in the professional activity of masters of pharmacy.

5. Program learning outcomes			
List of learning outcomes			
Learning outcome code	The content of the learning outcome	Reference to the competency matrix	

(K – Knowledge, S – skills, C – competence, <mark>AB – ??</mark>)		code (PLO – practical learning outcomes)
K-1	Know your social and community rights and responsibilities	PLO-1
K-2	Know the methods of implementing knowledge in solving practical problems	PLO-2; PLO-4; PLO-6; PLO-22;
K-3	Know the methods of implementing knowledge in solving practical problems	PLO-2; PLO-4; PLO-6; PLO-12; PLO-22;
K-4	Know the features of the modern professional environment and professional activity	PLO-2; PLO-4; PLO-5; PLO-6; PLO-10; PLO-22;
K-5	Know the structure and features of professional activity	PLO-2; PLO-4; PLO-5; PLO-6; PLO-10; PLO-22;
K-6	Know the mechanisms of adaptation and algorithms for action in a new situation	PLO-4; PLO-6; PLO-7; PLO-20; PLO-22;
K-7	Have a perfect knowledge of the native language and basic knowledge foreign language	PLO-8
K-8	Know modern information and communication technologies	PLO-2; PLO-4; PLO-9
K-9	Know the tactics and strategies of communication, laws and ways of communicative behavior	PLO-2; PLO-4; PLO-6; PLO-7; PLO-10; PLO-22; PLO-25;
K-10	Know the methods of assessing the quality of work performed	PLO-11
K-11	Know the basic approaches of management in the professional activities of pharmaceutical organizations, the principles of HR-management and self-management	
K-12	Know the regulatory and legal framework of Ukraine, a set of good pharmaceutical practices that regulate the requirements for professional activity	PLO-4; PLO-9; PLO-20; PLO-24;
K-13	Know the legal and ethical standards of professional conduct and responsibility	PLO-5; PLO-6; PLO-10; PLO-25;
K-14	Know the basic principles of general and marketing management in the marketing mix of pharmaceutical market players	PLO-2; PLO-4; PLO-6; PLO-7; PLO-9; PLO-12, PLO-20; PLO-22;

		PLO-25; PLO-29
S-1	To form one's civic consciousness, to be able to act in accordance with it	PLO-1
S-2	Be able to use professional knowledge to solve in practical situations	PLO-2
S-3	Be able to analyze professional information, make informed decisions, acquire modern knowledge	PLO-4
S-4	Be able to show initiative; to constantly search for new opportunities outside the available resources, to engage in self-development and self-realization	PLO-5
S-5	Be able to carry out professional activities that require updating and integration of knowledge	PLO-6; PLO-7; PLO-10
S-6	Be able to adapt to the new and act according to specific situations	PLO-6; PLO-7
S-7	Be able to apply knowledge of the native language, both orally and in writing, be able to communicate in a foreign language	PLO-8
S-8	Be able to apply modern information and communication technologies in practice	PLO-9
S-9	Be able to choose ways and strategies of communication to ensure effective teamwork	PLO-10
S-10	Be able to ensure the quality of work performed	PLO-11
S-11	Be able to apply the acquired knowledge in practice, demonstrate leadership skills.	PLO-2; PLO-12; PLO-20; PLO-22; PLO-25
S-12	Be able to apply knowledge of regulations, legislation of Ukraine and recommendations of good pharmaceutical practices in practice.	PLO-24
S-13	Be able to demonstrate in practice communicative communication skills, form and develop social and labor relations	PLO-10; PLO-25
S-14	Be able to conduct marketing research and use their results for the general and management of marketing activities of pharmaceutical organizations	1
<u>AB-1</u>	Take responsibility for your civic position and activities	PLO-1; PLO-5
<u>AB-2</u>	Be responsible for the timeliness of decisions	PLO-4; PLO-6
<u>AB-3</u>	Be responsible for the timely acquisition of modern knowledge.	PLO-4; PLO-9
<u>AB-4</u>	Take responsibility for identified initiatives	PLO-6; PLO-7
<u>AB-5</u>	Be responsible for professional development with high level of autonomy	PLO-6; PLO-7
<u>AB-6</u>	Be responsible for the chosen mechanism of adaptation and action in the new situation	PLO-7
<u>AB-7</u>	Be responsible for fluency in the native language,	PLO-8

	for the developmen				
<u>AB-8</u>	Be responsible for technologies	the choice of information	n or communication	PLO-9	
<u>AB-9</u>	Be responsible for	Be responsible for the choice and tactics of communication			
<u>AB-10</u>	Be responsible for	the quality of work perfo	rmed	PLO-11	
AB-11		for the developed, implemagement in professional a		PLO-20; PLO-22	
AB-12	1	quality and timely use ents in professional activity	y	PLO-24	
<i>AB-13</i>		compliance with ethical s act and responsibility, for ills		PLO-25	
AB-14	management withi	for the organized system on the framework of marked armaceutical market		PLO-12; PLO-22; PLO-29	
	6. Fo	rmat and scope of the co	ourse		
Course format (specify full-time or part-time)		Full-time education			
Kind of occupations		Number of hours		Number of groups	
Lectures (L)	48			5	
Practical classes (PC)	106			5	
Seminars (S)	-	-			
Independent student's work (ISW)	124	5			
	7. Top	pics and content of the co	ourse		
Occu-pations type code	Торіс	Learning content	Learning outcome code	Teacher	
L-1	evolution of management revolutions. The essence of modern management theories. Stages of development of the world economy. The essence of management, marketing and logistics as management theories.		As. Prof. Levytska O.R.		
L-2	Organizations of the pharmaceutical system as objects of management	Organization as an open system. Classification of organizations. General features and conditions of success of the organization.	PLO-2; PLO-5;	As. Prof. Levytska O.R.	

		Characteristics of the stages of the life cycle of the organization. The process of managing the organization.		
L-3	Subjects of pharmaceutical business and conditions of their management	The essence, principles and main features of entrepreneurship. Classification of enterprises and conditions of entrepreneurial activity. Organizational forms of entrepreneurial activity.	PLO-4; PLO-5; PLO-8; PLO-12; PLO-24;	As. Prof. Levytska O.R.
L-4	Association of enterprises. Registration and licensing of business activities.	legal forms of associations of enterprises. Procedure for state registration of pharmaceutical enterprises.	P U A	As. Prof. Levytska O.R.
L-5	Planning and organization as general functions of pharmaceutical management	relationship of management functions. Classification of management functions on the basis of management processes, object of management	PLO-8; PLO-12; PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R.
L-6	Motivation, control and regulation as general functions of pharmaceutical management	Basic semantic and processional theories of motivation. The essence and classification of control. Regulation as a general function of management.	PLO-2; PLO-4; PLO-5; PLO-8; PLO-11; PLO-12; PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R.
L-7	Методи фармацевтичного менеджменту		PLO-2; PLO-4;	As. Prof. Levytska O.R.

		management methods. A set of good	PLO-5; PLO-8;	
		pharmaceutical	PLO-8; PLO-9;	
		practices. Principles of	· · · · · · · · · · · · · · · · · · ·	
		total quality	rLO-11,	
		management. Standards	PLO-12;	
		of the international	PLO-22;	
		organization for ISO		
		standardization.	SC-10; SC-13	
		Corporate integrated systems.		
L-8	Connecting	The essence and	PLO-2; PLO-4;	As. Prof. Levytska
	processes in		PLO-5; PLO-6;	O.R.
	pharmaceutical	management decisions.		
	management	Types of	PLO-11;	
		communications,	,	
		characteristics of the	PLO-12;	
		communication process.	PLO-22;	
			PLO-24;	
		management activities.	SC-10; SC-13	
L-9	Leadership and	The essence of	PLO-2; PLO-4;	As. Prof. Levytska
	leadership in	leadership, leadership	PLO-5; PLO-6;	O.R.
	pharmaceutical	and power. Forms of	PLO-7: PLO-8:	
	organizations	power. Modern	PLO-10;	
		approaches to	DI O 11.	
		leadership. Types of	PLO-12;	
		leadership styles.	PLO-22;	
			PLO-24;	
			<u> </u>	
			SC-10; SC-13	
L-10	Conflicts and	The essence, causes and	PLO-2; PLO-4;	As. Prof. Levytska
	stresses as objects of leadership	types of conflicts.	PLO-5; PLO-6;	O.R.
	or readership	Conflict management.	PLO-8; PLO-10;	
		Behavioral styles in a conflict situation.	PLO-11;	
		Characteristics of stress.	PLO-12;	
		Directions for	PLO-22;	
		overcoming stress.	PLO-24;	
		<i>G</i>	SC-10; SC-13	
L-11	Management of	Labor Code of Ukraine.	PLO-2; PLO-4;	As. Prof. Levytska
	labor relations of	Characteristic features	PLO-5; PLO-8;	O.R.
	pharmaceutical organizations	of the collective	PLO-10;	
	(lecture 1)	agreement. The essence,	PLO-11;	
		guarantees, terms and	PLO-12;	
		procedure for	PLO-22;	
		concluding an employment contract.	PLO-24;	
		Legal support of labor	<u> </u>	
		relations.	50 10, 50-13	
		<u> </u>		

L-12	Management of labor relations of pharmaceutical organizations (lecture 2)	Working hours and rest time. Motivation of work, guarantees and compensation in the process of labor activity. Legal regulation of labor, labor discipline and labor disputes.	PLO-2; PLO-4; PLO-5; PLO-8; PLO-10; PLO-11; PLO-12; PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R.
L-13	Management of labor potential of the pharmaceutical industry	Pharmaceutical education in Ukraine. Pharmaceutical personnel management.	PLO-2; PLO-4; PLO-5; PLO-8; PLO-10; PLO-11; PLO-12; PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R.
L-14	General provisions of pharmaceutical marketing	Characteristics and classification of the pharmaceutical market. Elements of the infrastructure of the pharmaceutical market. The essence and development of marketing concepts. Components of marketing activities of pharmaceutical companies.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R.
L-15	Functional support of marketing activities of pharmaceutical companies	Elaboration of pharmaceutical marketing strategy and tactics. Principles of marketing control. Marketing information system concept.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R.
L-16	Principles of marketing research of the pharmaceutical market and study of consumer behavior of medicines		PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R.

		consumer organization in the pharmaceutical market.		
L-17	Modeling the laws of the pharmaceutical market and research of marketing opportunities of pharmaceutical companies	SC-17 Pharmaceutical market research. Determining the need for medicines. Pharmaceutical market segmentation and drug positioning. Selection of target market segments. Assessment and modeling of market opportunities of pharmaceutical companies. Benchmarking in the activities of pharmaceutical companies. The essence of benchmarking and its types. Principles and stages of the benchmarking process.	PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R.
L-18	Product policy of pharmaceutical companies	Assortment policy of the pharmaceutical company. Classifications of drugs and VMP. Management of the range of pharmaceutical products. Analysis of the range of drugs. Development of new drugs.	PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R.
L-19	Drug life cycle. Quality and competitiveness of drugs.	Characteristics of the stages of the life cycle of drugs. Quality and competitiveness of drugs. Characteristics of methods for determining competitiveness. Trademarks, brands and packaging of drugs. Trademark strategies.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R.
L-20	Pricing policy of pharmaceutical companies	Factors of pricing and elasticity of demand for medicines. Basic drug pricing strategies.	PLO-7: PLO-8:	As. Prof. Levytska O.R.

		Models and methods of drug pricing. Procedure for state registration of prices for basic medicines. Analysis of the price situation in the pharmaceutical market.	SC-17	
L-21	Sales policy of pharmaceutical companies	Variants of structures of distribution channels (sales methods) of drugs. Length and width of traditional drug distribution channels. Marketing pharmaceutical systems. Drug distribution strategies: direct, echeloned and flexible.	PLO-7; PLO-8; PLO-12;	As. Prof. Levytska O.R.
L-22	Pharmaceutical logistics in the sales policy of pharmaceutical companies.	Concepts and types of pharmaceutical logistics. Functional types of pharmaceutical logistics. Auxiliary components of pharmaceutical logistics.	PLO-7; PLO-8; PLO-12;	Prof. Hromovyk B.P.
L-23	Promotion of medicines on the market	Marketing communications system of a pharmaceutical company. Factors that determine the structure of the marketing communications system. Advertising of medicines. "Public relations" of a pharmaceutical company, personal sales and sales promotion of medicines. Merchandising in pharmacies.	PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R.
L-24	International pharmaceutical marketing	SC-17 Basic principles of international pharmaceutical marketing. Formation of a complex of international	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R.

PC-1, ISW-1	The essence and evolution of management. The essence of modern management theories	pharmaceutical marketing. Representative offices of pharmaceutical companies are an important player in the international market. The essence of management, marketing and logistics as modern management theories.	PLO-1; PLO-2; PLO-8; SC-10; SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-2, ISW-2		TOT Management.	PLO-1; PLO-2; PLO-8; SC-10; SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-3, ISW-3	The essence and evolution of management. Entities and levels of government	Comparative characteristics of Japanese and American management models. Entities and levels of government. Character traits of the manager and the entrepreneur. Roles inherent in the manager, according to the classification of Henry Mintzberg. Socio-ethical aspects of management. Division of labor at the management level.	SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-4, ISW-4	Pharmaceutical system organizations as objects of management. The essence and classification of organizations	Modern approaches to the classification of organizations. General features and conditions of success of the organization. Characteristics of the stages of the life cycle of the organization.	PLO-1;PLO-2; PLO-5;PLO-8; PLO-12; SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-5, ISW-5	Pharmaceutical system	Causes and main types of formal groups. The	PLO-1;PLO-2; PLO-5;PLO-8;	As. Prof. Levytska O.R.

	organizations as objects of management. Teams (groups) of employees in the organization	essence and characteristics of informal groups.	PLO-12; SC-10 - SC-13	As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-6, ISW-6	Pharmaceutical system organizations as objects of management. Factors influencing the organization	The essence and classification of factors influencing the organization. The organization's reactions to changes in the external environment and the regulation of its conditions. Characteristics of internal environment factors, external environment of direct and indirect action.	PLO-1;PLO-2; PLO-5;PLO-8; PLO-12; SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-7, ISW-7	Pharmaceutical system organizations as objects of management. The process of managing the organization	Characteristics of the stages of the management process of the organization. Control and managed systems of the organization.	PLO-1;PLO-2; PLO-5;PLO-8; PLO-12; SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-8, ISW-8	Subjects of pharmaceutical business and conditions of their management. Entrepreneurship and enterprises in pharmacy	Dusiness associations,	PLO-2;PLO-4; PLO-5;PLO-8; PLO-12;PLO-24; SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-9, ISW-9	Subjects of pharmaceutical business and conditions of their management. Procedure for registration and licensing of business activities in pharmacy	Requirements of current legislation to the procedure for registration and licensing of business activities.	PLO-2;PLO-4; PLO-5;PLO-8; PLO-12;PLO-24; SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-10, ISW-10	Subjects of pharmaceutical business and conditions of their management. Entrepreneurial risk in the activities	Economic (entrepreneurial) risk. Risks of external and internal environment of pharmaceutical enterprises. Business	PLO-2;PLO-4; PLO-5;PLO-8; PLO-12;PLO-24; SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.

	of pharmaceutical companies	losses. Ways to reduce the risks of pharmaceutical companies.		
PC-11, ISW-11	Subjects of pharmaceutical business and conditions of their management. Bankruptcy and termination of pharmaceutical companies	Termination of business activity of a pharmaceutical enterprise. Bankruptcy and the general procedure for liquidation of a pharmaceutical enterprise.	PLO-2;PLO-4; PLO-5;PLO-8; PLO-12;PLO-24; SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-12, ISW-12	Functions of pharmaceutical management. Planning as a general function of management	Planning as a general function of management. Strategic planning and its stages. Current and operational planning as a kind of tactical planning.	PLO-2;PLO-4; PLO-5;PLO-8; PLO-12;PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-13, ISW-13	Functions of pharmaceutical management. Organization as a general function of management	The essence of the function of organization and the main types of organizational management structures. Characteristic features of combined organizational management structures.	PLO-2;PLO-4; PLO-5;PLO-8; PLO-12;PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-14, ISW-14	Functions of pharmaceutical management. Motivation as a general function of management	The essence of motivation. Characteristic features of the main semantic and processional theories of motivation.	PLO-2; PLO-4; PLO-5; PLO-8; PLO-11; PLO-12; PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-15, ISW-15	Functions of pharmaceutical management. Control and regulation as general functions of management	classification of control. Regulation as a general	PLO-2; PLO-4; PLO-5; PLO-8; PLO-11; PLO-12; PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-16, ISW-16	Methods of pharmaceutical management	Economic, technological, socio- psychological and administrative methods of management. Good practices in pharmacy.	PLO-2; PLO-4; PLO-5; PLO-8; PLO-9; PLO-11; PLO-12; PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.

PC-17, ISW-17	Connecting processes in pharmaceutical management. Management decisions		PLO-11, PLO-12; PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-18, ISW-18	Connecting processes in pharmaceutical management. Communications and information in management	classification of communications. Characteristics of the communication process. Information support of the communication	PLO-11; PLO-12; PLO-22; PLO-24;	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-19, ISW-19	Connecting processes in pharmaceutical management. Record keeping at pharmaceutical companies	management information. Organization of document circulation at pharmaceutical enterprises. Automation of management	PLO-11; PLO-12; PLO-22;	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-20, ISW-20		The essence of leadership, leadership and power. Forms of power.	PLO-2; PLO-4; PLO-5; PLO-6; PLO-7; PLO-8; PLO-10; PLO-11; PLO-12; PLO-22; PLO-24;	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.

	leadership in pharmaceutical organizations		SC-10; SC-13	
PC-21, ISW-21	Leadership and leadership in pharmaceutical organizations. Leadership styles	Modern approaches to leadership. Types of leadership styles.	PLO-2; PLO-4; PLO-5; PLO-6; PLO-7; PLO-8; PLO-10; PLO-11; PLO-12; PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-22, ISW-22		The essence, causes and types of conflicts. Conflict management. Behavioral styles in a conflict situation. Characteristics of stress. Directions for overcoming stress.	PLO-2; PLO-4; PLO-5; PLO-6; PLO-7; PLO-8; PLO-10; PLO-11; PLO-12; PLO-22; PLO-24; SC-10; SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-23, ISW-23	Labor relations management of pharmaceutical organizations. Legal support of labor relations in pharmaceutical organizations	Characteristic features of collective and employment agreements. Features of the test during employment. Transfer to another job and termination of the employment contract.	PLO-2; PLO-4; PLO-5; PLO-8; PLO-10; PLO-11; PLO-12; PLO-22; PLO-24; SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-24, ISW-24	Labor relations management of pharmaceutical organizations. Working hours and rest time		PLO-2; PLO-4; PLO-5; PLO-8; PLO-10; PLO-11; PLO-12; PLO-22; PLO-24; SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-25, ISW-25		Pay. Guarantees for certain categories of employees. Conditions for receiving compensation by different categories of employees.	PLO-2; PLO-4; PLO-5; PLO-8; PLO-10; PLO-11; PLO-12; PLO-22; PLO-24; SC-10 - SC-13	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-26, ISW-26	Labor relations management of pharmaceutical organizations. Legal regulation of labor, labor	Labor discipline and labor protection. Labor of women, youth. Benefits for employees who combine work with	PLO-2; PLO-4; PLO-5; PLO-8; PLO-10; PLO-11; PLO-12; PLO-22; PLO-24;	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.

	discipline and labor disputes	training. Individual labor disputes.	SC-10 - SC-13	
PC-27, ISW-27	Management of labor potential of the pharmaceutical industry. Pharmaceutical education in Ukraine. Postgraduate education, training of scientific and pedagogical staff.	Multistage continuing pharmaceutical education. Types and forms of postgraduate education. Certification of pharmacists and	PLO-11; PLO-12; PLO-22;	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-28, ISW-28	Management of labor potential of the pharmaceutical industry. Personnel management in pharmaceutical organizations	Pharmaceutical personnel management. Characteristic features and peculiarities of the stages of pharmaceutical personnel management. Staff rotation. Evaluation of the personnel of the pharmaceutical enterprise.	PLO-11; PLO-12; PLO-22;	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-29, ISW-29	General provisions of pharmaceutical marketing. Characteristics and classification of the pharmaceutical market	Pharmaceutical market, its subjects and object. Signs by which the pharmaceutical market is classified. Elements of the infrastructure of the pharmaceutical market.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-30, ISW-30	General provisions of pharmaceutical marketing. The essence and development of marketing concepts of pharmaceutical organizations	The essence of pharmaceutical marketing. Marketing concept. Goals and types of pharmaceutical marketing depending on the state of demand.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-31, ISW-31	General provisions of pharmaceutical marketing. Components of marketing	Model of marketing activity of pharmaceutical enterprises. Complex marketing.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12;PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.

	activities of pharmaceutical companies			
PC-32, ISW-32	Functional support of marketing activities. Elaboration of strategy and tactics of pharmaceutical marketing	Marketing management. Modeling a business plan for a pharmaceutical company.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-33, ISW-33	Functional support of marketing activities. Principles of marketing control	Types of marketing control. Characteristics of operational control. Strategic marketing control.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-34, ISW-34	Functional support of marketing activities. Marketing environment of a pharmaceutical company	The structure of the marketing environment of the pharmaceutical company.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-35, ISW-35	Functional support of marketing activities. Marketing information system concept	The essence of the marketing information system. Characteristics of internal reporting systems and external current information. Characteristics of the marketing research system and analytical marketing system	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12;PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-36, ISW-36	Principles of marketing research of the pharmaceutical market and study of drug consumers. Organization of the marketing research process	The essence and classification of marketing research. Stages of the marketing research process. Characteristics of primary and secondary marketing information.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-37, ISW-37	Principles of marketing research of the pharmaceutical market and study of drug consumers.	Characteristics of methods of collecting primary information. Ways to communicate with the audience.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.

PC-38, ISW-38	Technology of marketing research of behavior of consumers of medicines Principles of marketing research of the pharmaceutical market and study of drug consumers. Research of consumer behavior in the consumer segment of the	Consumer market and factors that influence consumer behavior in it. The process of deciding on the purchase of overthe-counter drugs, the appointment of prescription drugs.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12;PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
	pharmaceutical market	Modeling of consumer behavior of the consumer organization in the pharmaceutical market.		
PC-39, ISW-39	Modeling the laws of the pharmaceutical market and research of marketing opportunities of pharmaceutical companies. Pharmaceutical market research	Potential, capacity and market conditions of the pharmaceutical market. Determining the need for drugs.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-40, ISW-40	Modeling the laws of the pharmaceutical market and research of marketing opportunities of pharmaceutical companies. Pharmaceutical market segmentation and drug positioning	principles of pharmaceutical market segmentation. Selection of target segments of	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12;PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-41, ISW-41	Modeling the laws of the pharmaceutical market and research of marketing opportunities of pharmaceutical companies. Assessment and modeling of market opportunities of pharmaceutical	of pharmaceutical companies using SWOT-analysis, Ansoff matrix. Analysis of the pharmaceutical "portfolio" of the enterprise using the	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.

	companies. Benchmarking in the activities of pharmaceutical companies	stages of benchmarking.		
PC-42, ISW-42	Product policy of pharmaceutical companies. Assortment policy of pharmaceutical companies	Classifications of drugs and VMP. Types and management of the range of pharmaceutical products. Analysis and expansion of the range of drugs.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-43, ISW-43	Product policy of pharmaceutical companies. Drug life cycle. Quality and competitiveness of drugs	Characteristics of the stages of the life cycle of drugs. Quality and competitiveness of drugs. Characteristics of methods for determining the competitiveness of drugs.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-44, ISW-44	Product policy of pharmaceutical companies. Trademarks, brands and packaging of medicines	Trademarks, brands and packaging of drugs. Trademark strategies.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-45, ISW-45	Pricing policy of pharmaceutical companies. Factors of pricing and elasticity of demand for drugs. Basic drug pricing strategies.	The main factors in the formation of a possible price for drugs. Price elasticity of demand for drugs. Pricing strategies for the pharmaceutical market (market penetration; price leader; price-quality strategy; associate market strategy).	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-46, ISW-46	pharmaceutical companies. Models and methods of drug pricing. The procedure for state registration of	Drug pricing methods related to the cost model. Methods of drug pricing model based on market demand. Pricing methods related to the competitive model. Break-even analysis. Research of the price situation of the pharmaceutical market.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-47, ISW-47	Sales policy of	The essence of	PLO-2; PLO-4;	As. Prof. Levytska

	pharmaceutical companies. Variants of distribution structures (sales methods) of medicines	traditional drug distribution channels. Length and width of drug distribution channels. Marketing pharmaceutical systems.	PLO-7; PLO-8; PLO-12;PLO-25; PLO-29; SC-17	O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-48, ISW-48	Sales policy of pharmaceutical companies. Drug distribution strategies. Pharmaceutical logistics.	Direct, echeloned and flexible drug distribution strategies. Concepts and types of pharmaceutical logistics. Selection of drug distribution systems.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-49, ISW-49	Promotion of medicines on the market. Marketing communications system of a pharmaceutical company	Goals and characteristics of the components of the communication policy of the pharmaceutical company.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-50, ISW-50	Promotion of medicines on the market. The main elements of the marketing communications system	medicines on the market. The main elements of the marketing communications relations", sales promotion and personal selling as components of marketing	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12;PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-51, ISW-51	Basic principles of international pharmaceutical marketing. Characteristics of the global pharmaceutical market and the environment of international marketing. Methods and forms of entering the foreign pharmaceutical market	The essence and goals of international pharmaceutical marketing. Characteristics of the world pharmaceutical market. Proactive and reactive motives for starting activities in foreign markets. Stages of entry of a pharmaceutical company into the foreign market.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12;PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.
PC-52, ISW-52	Formation of a complex of international pharmaceutical marketing	Strategies of the marketing complex in the international pharmaceutical market. Pricing in the system of	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.

		international pharmaceutical marketing. Distribution and promotion of drugs on the international market.		
PC-53, ISW-53	Representative offices of pharmaceutical companies are an important player in the international market	Features of activity of representations of the pharmaceutical enterprises. Principles of work of representative offices of pharmaceutical companies.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; SC-17	As. Prof. Levytska O.R. As. Prof. Dorykevych K.I. As. Chukhray I.L.

In the process of studying the discipline "Pharmaceutical Management and Marketing" the following teaching methods are used:

- by type of cognitive activity: explanatory-illustrative; analytical, synthetic, inductive, deductive;
- according to the main stages of the process: formation of knowledge; application of knowledge; generalization; fixing; audit;
 - according to the system approach: stimulation and motivation; control and self-control.
 - by sources of knowledge: verbal story, conversation; visual demonstration, illustration.
 - by the level of independent mental activity: problematic; partial search; research.

8. Verification of learning outcomes

Current control

is carried out during training sessions and aims to check the assimilation of educational material by students.

The current control of students' knowledge is assessed according to the following scheme:

Learning outcome code	Code type of classes	Method of verifying learning outcomes	Enrollment criteria
K-1-14; S-1-14; K-1-14; AB-1-14	L-1 - 24 PC-1 - 53 ISW-1 -53	Types of work that the student must perform: 1. Work on a practical lesson: A) active participation in practical classes: discussion of certain topics of the course; presentation of creative works, etc.; B) test control.	Assessment of work in practical classes is based on the results of students' work in practical classes, which takes into account not only the level of problem solving, but also the activity of students in discussion, ability to oppose, ask questions, express their vision of the problem. It is evaluated on a 4-point scale. Test control is assessed on a 4-point scale. Individual work Performance of situational tasks is assessed on a 4-point scale. When preparing a presentation, it is necessary to assume that the plan, the clearly defined goals, the basic idea of the presentation, the conclusions and the list of sources used for its preparation are obligatory. At the same time, the student should not only prepare, but also briefly (for 5-7 minutes) to reveal to the audience the main problems

	2. Independent work: Execution of one of the types of work: 1) elaboration and solution of certain situational tasks assigned to independent work; 2) preparation of the	2) the level of 3) independent 4) the ability ime, informatively opic; 5) the ability the	e of the content of the
	Final control		
General evaluation system	Participation in the work during the se scale	emester / exam - 60%	6 / 40% on a 200-point
Rating scales	traditional 4-point scale, multi-point (2	200-point) scale, EC	TS rating scale
Conditions of admission to the final control	The student attended all practical (laboratory, seminar) classes and received at leas 120 points for current performance		
Type of final control	Methods of final control	f final control	
Test	current control. Grades from the 4-point scale are points is 200. T		The maximum number of points is 200. The minimum number of points is 120
	Examination criteria / diffe	erentiated test	
Examination	Exam as a kind of final control of standard achievements is carried out stage of completion of the study discipline as a whole. It is carried out amount of educational material determs the working program of the act discipline and in the terms established.	tudents' It at the of the exam is 80 points when the ermined answer - 1. It at the exam is 80 points when the exam is 80 points	can score when taking the an according the exam is 50. The minimum number of an taking the exam is 50. The test tasks: correct point. The minimum number of a taking the exam is 50. The test tasks: correct point. The minimum number of a taking the exam is the test tasks: correct point and problems for the test task is completed, the exam is applied, all calculations are performed, are correctly designed. The task is completed, for are made in the

theoretical and practical training.

Exam rules:

The first stage is a written answer to 40 test tasks of A format (1 point for the correct answer).

O points - the task is not completed. The total number of points for the implementation of situational tasks

Stage II - solving 2 situational problems (typical tasks) - 40. (typical tasks) with testing of practical skills.

errors in calculations and design of results, the wrong algorithm is used. 0 points - the task is not completed. The total number of points for the implementation of situational tasks (typical tasks) - 40.

The maximum number of points that a student can score for the current academic activity for admission to the exam (differentiated test) is 120 points.

The minimum number of points that a student must score for the current academic activity for admission to the exam (differentiated test) is 72 points.

The calculation of the number of points is based on the grades obtained by the student on a 4-point (national) scale during the study of the discipline, by calculating the arithmetic mean (AM), rounded to two decimal places. The resulting value is converted into points on a multi-point scale as follows: $x = (AM \times 200)/5$

9. Course policy

The policy of the course is determined by a system of requirements for students in the study of the discipline and is based on the principles of academic integrity. Students are explained the value of acquiring new knowledge, the need to independently perform all types of work and tasks provided by the work program of the discipline. No references to the sources used. Fabrication of sources, writing off, interfering in the work of other students are examples of possible academic dishonesty. Detection of signs of academic dishonesty in the student's work is the basis for its non-enrollment by the teacher, regardless of the extent of plagiarism or deception.

10. Literature

Required

- 1. Economic Code of Ukraine. Law of Ukraine of January 16, 2003 № 436-IV. URL: http://zakon3.rada.gov.ua/laws/show/436-15.
- 2. Fundamentals of the legislation of Ukraine on health care: Law of Ukraine of 19.11.1992 № 2801-XII. URL: http://zakon0.rada.gov.ua/laws/show/2801-12
- 3. On state registration of legal entities, natural persons-entrepreneurs and public formations: Law of Ukraine of 26.11.2015 № 835-VIII. URL: http://zakon5.rada.gov.ua/laws/show/835-19
- 4. On medicines: Law of Ukraine of 04.04.1996 № 123/96-VR. URL: http://zakon3.rada.gov.ua/laws/show/123/96-%D0%B2%D1%80
- 5. On advertising: Law of Ukraine of 03.07.1996 № 270/96-BP URL: http://zakon3.rada.gov.ua/laws/show/270/96-%D0%B2%D1%80
- 6. On licensing of economic activities: Law of Ukraine of 02.03.2015 № 222-VIII URL: http://zakon3.rada.gov.ua/laws/show/222-19
- 7. Hromovyk B.P. Management and marketing in pharmacy: a textbook / B.P. Hromovyk, G.D. Hasyuk, O.R. Levytska; for order. Dr. Pharm. Sciences, Prof. B.P. Hromovyk. K.: Meditsina, 2008. 752 s.
- 8. Hromovyk B.P. Pharmaceutical marketing: Theoretical and applied principles / Hromovyk B.P., Hasyuk G.D., Levytska O.R. Vinnytsia: New book, 2004. 464 p.
- 9. Management in pharmacy / O.E. Kuzmin, B.P. Hromovyk, G.D. Hasyuk, O.R. Levytskaya, O.G. Melnyk. Vinnytsia: New book, 2005. 448 p.
- 10. Pharmaceutical marketing: a textbook / B. Hromovyk, G. Hasyuk, L. Moroz, N. Chukhray. Lviv: Nautilus, 2000. 320 p.
- 11. Mnushko Z.M., Musienko N.M., Olkhovskaya A.B. Workshop on management and marketing in pharmacy. Ch. I. Management in pharmacy: Textbook. way. for students. higher textbook lock H.: NUPh Publishing House; Golden Pages, 2002. 144 p.

- 12. Workshop on management and marketing in pharmacy. Ch. II. Marketing in pharmacy: textbook. manual for university students / Z. N. Mnushko, N.M. Musienko, I.V. Pestun, O. Yu. Rogulya. Kharkiv: NUPh Publishing House: Golden Pages, 2004. 140 p.
- 13. Legislation of Ukraine. URL: http://zakon3.rada.gov.ua/laws
- 14. Regulatory documents of the Ministry of Health of Ukraine. URL: / http://mozdocs.kiev.ua
- 15. Code of Labor Laws of Ukraine: Law of Ukraine of 10.12.1971 № 322-VIII. URL: http://zakon2.rada.gov.ua/laws/show/322-08

Optional

- 1. Armstrong G. Marketing. General course: textbook. manual. 5th type. / G. Armstrong, F. Kotler; lane. from English M .: Williams Publishing House, 2001. 608 p.
- 2. Afanasyev M.V., Shemaeva L.G., Sherlock V.S. Fundamentals of management: Educational and methodical manual for independent study of the discipline / Ed. prof. M.V. Afanasyeva. H .: VD "INZHEK", 2003. 484 p.
- 3. Belevtsev M.I., Shestopalova L.V. Commodity market infrastructure. Kyiv: Center for Educational Literature, 2005. 416 p.
- 4. Butenko N.V. Marketing: handy. K .: Ataka, 2006. 300 s.
- 5. Voronkova V.G. Personnel management: Textbook. way. K .: VD "Professional", 2004.192 p.
- 6. Garkavenko S.S. Marketing: handy. Kyiv: Libra, 2004. 712 p.
- 7. Documentation in management: Textbook. / O.H. Krichok, V.I. Korbutyak, V.K. Protsyuk and others. Kyiv: Center for Education. Literature, 2003. 216 p.
- 8. Ilyashenko S.M. Marketing product policy: textbook. Sumy: VTD "University Book", 2005. 234 p.
- 9. Infrastructure of the commodity market: textbook. way. / O.B. Prokopenko, V.Yu. School, O.O. Dehtiarenko, C.M. Shewaved. K .: Center for Educational Literature, 2007. 296 p.
- 10. Krykavsky E.V. Logistics. Fundamentals of theory: textbook. 2nd ed., Ext. and reworked. Lviv: National University "Lviv Polytechnic" (Information and Publishing Center "INTELLECT +" of the Institute of Postgraduate Education), "Intellect-West", 2006. 456 p.
- 11. Kutsenko V.M. Marketing Management: Textbook. manual. K .: MAUP, 2003. 184 s.
- 12. Lisitsa N.M. International marketing: textbook. allowance. / H.M. Lisitsa, V.D. Rogozhin, V.V. Yurchenko 2nd ed., Stereotype. H.: INZHEK Publishing House, 2006. 176 p.
- 13. International marketing in pharmacy / Z.N. Mnushko, H.B. Chmykhalo, H.M. Musienko et al. Kharkiv: NUPh Publishing House: Golden Pages, 2006. 392 p.
- 14. Mescon M.H., Albert M., Hedoury F. Fundamentals of Management: Per. with English M.: Delo, 1992. 720 s.
- 15. Fundamentals and methods of management in pharmacy / R.M. Pinyazhko, B.L. Parnovskyy, O.L. Grom, A.Y. Datsko. Kiev: Higher School, 1986. 351 p.
- 16. Posilkina O.V. Pharmaceutical logistics: monograph. / O.B. Posilkina, R.V. Sahaydak, B.P.. Hrounderbolt; for order, O.B. Posylkina, H.: NUPh Publishing House: Golden Pages, 2004. 320 p.
- 17. Pharmacy Management: Textbook. for students. higher textbook institutions / V.M. Tolochko, I.V. Mishchenko, D.L. Velykyy, etc.; For order. V.M. Tolochko. Kh.: NUPh Publishing House: Golden Pages, 2004. 388 p.
- 18. Pharmaceutical Encyclopedia / Chairman, ed. council and the author of the foreword VP Black. K .: "MORION", 2005. 848 p.

11. Equipment, logistics and software of the discipline / course

Working curriculum for the discipline.

Multimedia support of lectures.

Abstracts of lectures on the discipline.

Methodical recommendations for practical classes of higher education students.

Methodical materials that provide independent work for graduates.

Test and control tasks for practical classes.

Ouestions and tasks for the final control.

Methodical recommendations for the teacher.

MISA training platform.

The online system of continuing pharmaceutical education AdFarm S.A.

Computer class for 16 workstations connected to the local network of the university with direct access to the Internet.

Methodical materials for students:

- 1. Hromovyk B.P., Levytska O.R., Chukhray I.L. Pharmaceutical management and marketing. Part I. Management in pharmacy. Marketing as an integrative function of management: Methodical recommendations and a list of tasks for practical classes for students of the Faculty of Pharmacy full-time education. Lviv, 2020. 105 p.
- 2. Hromovyk B.P., Levytska O.R., Chukhray I.L. Pharmaceutical management and marketing. Part I. Management in pharmacy. Marketing as an integrative function of management: Methodical recommendations and the list of tasks for independent work of students of pharmaceutical faculty of a full-time form of training. Lviv, 2019. 26 p.
- 3. Hromovyk B.P., Levitska O.R., Khanyk N.L., Chukhrai IL Pharmaceutical management and marketing. Part II. Marketing in Pharmacy: Methodical recommendations and a list of tasks for practical classes for students of the Faculty of Pharmacy full-time education. Lviv, 2019. 78 p.
- 4. Gromovyk BP, Levitska OR, Chukhrai IL Pharmaceutical management and marketing. Part II. Marketing in Pharmacy: Methodical recommendations and a list of tasks for independent work of students of the Faculty of Pharmacy full-time education. Lviv, 2019. 23 p.
- 5. Levitska OR, Datsko AY, Gasyuk GD, Khanik NL, Chukhray IL Methodical recommendations for independent preparation of students of the Faculty of Pharmacy for the licensed integrated exam "Step 2. Pharmacy". Management and marketing in pharmacy. Lviv, 2012. 100 p.

12. Additional information

Responsible for the educational process at the department - Associate Professor Horodetska I.Ya. There is a student scientific circle at the department. Practical classes are held at: st. Pekarska, 75, building of Training and Production Pharmacy.

Website of the department: https://new.meduniv.lviv.ua/kafedry/kafedra-organizatsiyi-i-ekonomiky-farmatsiyi/

Compilers of syllabus:
Hromovyk B.P., Doctor of Pharmacy Science, Professor
Levytska O.R., Doctor of Pharmacy Science, Associated Professor
Head of the department:
Hromovyk B.P., Doctor of Pharmacy Sciences, Professor