The syllabus of the discipline Industrial practice on Pharmaceutical Management and Marketing

1. General information			
The name of the faculty	pharmaceutical		
specialty, level of higher education, form of education)	field of knowledge 22 "Health care" specialty 226 "Pharmacy, industrial pharmacy" educational program of master of pharmacy form of full -time study 2023-2024		
Name of discipline, code (e- mail address on the website of Danylo Halytsky LNMU)	WB 2.4. Industrial practice from MMPh		
(name, address, phone, e-mail) Head of the department	Organization and Economics of Pharmacy, Lviv, Pekarska str. 69, (032) 2768639 Kaf_organizationpharm@meduniv.lviv.ua Head of the Department, Doctor of Pharmacy, Professor Hromovyk B.P., hromovyk@gmail.com		
Year of study (year in which the study of the discipline)	5		
Semester (semester in which the study of the discipline is implemented)	X semester		
Type of course / module (obligatory / optional)	Selective		
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 (availability of the discipline for students within the Erasmus + program)	No		
Person responsible for the syllabus (person to be commented on the syllabus, contact e-mail)	Oksana Levitska, <u>levytska.oksana@gmail.com</u>		

Number of ECTS credits	4 credits / 120 hours
Number of hours	0/60/60
Language of teaching	In Ukrainian, English
Information about consultations	According to the schedule of the department

2. Short annotation to the course

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

Description of the discipline (abstract)

The internship with the IMF 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 "Industrial practice of MMPh" is the formation of higher pharmaceutical education students 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 "Industrial practice of MMPh" 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;
- acquaintance with application in practice of mechanisms of administrative influence on collective of workers in the conditions of market relations,
- study of communication processes;
- study of strategy and tactics of management and decision-making;
- mastering the methods of pharmaceutical market research and analysis of market opportunities of the pharmaceutical company;
- research of product, price, sales and communication policies of pharmaceutical companies.
- 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 (PC):
- PC 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.
- PC 12. Ability to use in professional activities knowledge of regulations, legislation of Ukraine and recommendations of good pharmaceutical practices.
- PC 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.
- PC 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

Industrial practice of MMPh is aimed at consolidating and deepening the theoretical knowledge gained in the study of pharmaceutical management and marketing, as well as mastering the applied aspects of management and pharmaceutical marketing, which will allow in the future to successfully carry out professional activities 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 code		
Kn-1	Know your social and community rights and responsibilities	PLO-1		
Kn-2	Know the methods of implementing knowledge in solving practical problems	PLO-2; PLO-4; PLO-6; PLO-22;		
Kn-3	Know the current trends in the industry and analyze them	PLO-2; PLO-4; PLO-6; PLO-12; PLO-22;		
Kn-4	Know the features of the modern professional environment and professional activity	PLO-2; PLO-4; PLO-5; PLO-6; PLO-10; PLO-22;		
Kn-5	Know the structure and features of professional activity	PLO-2; PLO-4; PLO-5; PLO-6; PLO-10; PLO-22;		
Kn-6	Know the mechanisms of adaptation and algorithms for action in a new situation	PLO-4; PLO-6; PLO-7; PLO-20; PLO-22;		
Kn-7	Have a perfect knowledge of the native language and basic knowledge foreign language	PLO-8		
Kn-8	Know modern information and communication technologies	<i>PLO-2; PLO-4;</i> <i>PLO-9</i>		
Kn-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;		
Kn-10	Know the methods of assessing the quality of work performed	PLO-11		
Kn-11	Know the basic approaches of management in the professional activities of pharmaceutical organizations, the principles of HR-management and self-management	PLO-2; PLO-4; PLO-6; PLO-7; PLO-10; PLO-11;		

		PLO-20;
		<i>PLO-22; PLO-25;</i>
Kn-12	Know the regulatory and legal framework of Ukraine, a set of good	<i>PLO-4; PLO-9;</i>
	pharmaceutical practices that regulate the requirements for professional activity	PLO-20; PLO-24;
Kn-13	Know the legal and ethical standards of professional conduct and	PLO-5; PLO-6;
	responsibility	PLO-10; PLO-25;
Kn-14	Know the basic principles of general and marketing management in	
	the marketing mix of pharmaceutical market players	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	PLO-2
5- 2	situations	1 LO-2
S-3	Be able to analyse professional information, make informed	PLO-4
	decisions, acquire modern knowledge	
S-4	Be able to show initiative; to constantly search for new	PLO-5
	opportunities outside the available resources, to engage in self-	-
	development and self-realization	
S-5	Be able to carry out professional activities that require updating and	PLO-6; PLO-7;
	integration of knowledge	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	
S-8	Be able to apply modern information and communication	PLO-9
	technologies in practice	
S-9	Be able to choose ways and strategies of communication to ensure	PLO-10
	effective teamwork	
S-10	Be able to ensure the quality of work performed	PLO-11
S-1 1	Be able to apply the acquired knowledge in practice, demonstrate	PLO-2; PLO-12;
	leadership skills.	PLO-20; PLO-22;
		PLO-25
S-1 2	Be able to apply knowledge of regulations, legislation of Ukraine	PLO-24
	and recommendations of good pharmaceutical practices in practice.	
S-1 3	Be able to demonstrate in practice communicative communication	PLO-10; PLO-25
	skills, to form and develop social and labor relations	
S-1 4	To be able to conduct market research and use the results to the	PLO-25; PLO-29
	public and management of marketing th activities of	f l
	pharmaceutical organizations	
AB-1	Take responsibility for your civic position and activities	PLO-1; PLO-5
AB-2	Be responsible for the timeliness of decisions	PLO-4; PLO-6
AB-3	Be responsible for the timely acquisition of modern knowledge.	PLO-4; PLO-9
AB-4	Take responsibility for identified initiatives	PLO-6; PLO-7
AB -5	Be responsible for professional development with high	PLO-6; PLO-7
	level of autonomy	
AB-6	Be responsible for the chosen mechanism of adaptation and action	PLO-7
	in the new situation	
AB-7	Be responsible for fluency in the native language,	PLO-8
,	for the development of professional knowledge	
AB-8	Be responsible for the choice of information or communication	PLO-9
	technologies	
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AB-9	Be responsible for the choice and tactics of communication	PLO-10
AB-10	Be responsible for the quality of work performed	PLO-11
AB-11	To be responsible for the developed, implemented and applied	PLO-20;
	approaches of management in professional activity	PLO-22
AB-12	Be responsible for quality and timely use	PLO-24
	normative documents in professional activity	
AB-13	Be responsible for compliance with ethical standards of	PLO-25
	professional conduct and responsibility, for the quality	
	of communication skills	
AB-14	To be responsible for the organized system of marketing	PLO-12;
	management within the framework of marketing mix of subjects of	PLO-22;
	the pharmaceutical market	PLO-29

6. Format and scope of the course					
Course format	Course format Face-to-face				
(specify full-time or part-time)	(specify full-time or part-time)				
Kind of occupations Number of hours Number of groups					
Lectures (L)	-				
Practical classes (PC)	60	5			
Seminars (S)	-				
Independent students work (ISW)	60	5			

	7. Topics and content of the course				
Code type to borrow	Topic	Learning content	Learning outcome code	Teacher	
PC-1, ISW-1	Acquaintance with the pharmacy as an organization.	name of the pharmacy and the legal address of the founding pharmaceutical company. Location of the pharmacy and mode of operation (including duration of shifts). Organizational and legal form and activities of the pharmacy. Characteristics	PLO-4;	Levitska O.R. Hrushkovska D.T., Chukhrai I.L.	
PC-2, ISW -2	leadership style in the	environmental factors of direct	PLO-4; PLO-5, PLO-8; PLO-11; PLO-12, PLO-22; PLO-24; PC-10; PC-13	Levitska O.R. Hrushkovska D.T., Chukhrai I.L.	

		pharmacy. Application of economic, administrative, socio-psychological and legal methods in the management of a pharmacy.		
PC-3, ISW -3	Analysis of communication processes of the pharmacy.	Characteristics of types of communications between structural units, with the external environment (suppliers, consumers, financial institutions, government agencies). Use of information in the management of a pharmacy. Organization of office work in a pharmacy.	PLO-4; PLO-5; PLO-6; PLO-8;	Levitska O.R. Hrushkovska D.T., Chukhrai I.L.
PC-4, ISW -4	Organization of work with personnel.	staff rotation and turnover, their causes.	PLO-2; PLO-4; PLO-5; PLO-8; PLO-10, PLO-11; PLO-12, PLO-22; PLO-24; PC-10 PC-13	Levitska O.R. Hrushkovska D.T., Chukhrai I.L.
PC-5, ISW -5	Study of the activities of the pharmaceutical market.	Characteristics of the pharmaceutical market and its functions. Subjects and object of the pharmaceutical market. Research of suppliers and competitors of the pharmacy as market participants.		Levitska O.R. Hrushkovska D.T., Chukhrai I.L.
PC-6, ISW -6	Research of product policy of pharmacy.	Analysis of the range of the pharmacy (width, depth, saturation, harmony, structure, novelty). Assortment groups in which the pharmacy specializes. Positioning of drugs by consumer preferences. Study of drug competitiveness.	PLO-2; PLO-4; PLO-7; PLO-8;	Levitska O.R. Hrushkovska D.T., Chukhrai I.L.
PC-7, ISW -7	the pharmacy.	Factors pricing of drugs. Analysis of pricing in a pharmacy. Research of the price situation of the pharmaceutical market. Determining the availability of drugs.	PLO-2; PLO-4; PLO-7; PLO-8; PLO-12; PLO-25; PLO-29; PC-17	Levitska O.R. Hrushkovska D.T., Chukhrai I.L.
PC-8, ISW -8	Study of sales policy of the pharmacy.	Variants of structures of distribution channels (methods of sale) of medicines. Length and width of traditional drug distribution channels. Trade intermediaries	PLO-2; PLO-4; PLO-7; PLO-8;	Levitska O.R. Hrushkovska D.T., Chukhrai I.L.

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		with which the pharmacy cooperates.	PLO-12;	
			PLO-25;	
			PLO-29;	
			PC-17	
PC-9,	Communication	The system of marketing communications	PLO-2;	Levitska O.R.
ISW -9	policy of the	of the pharmacy. Advertising of drugs		Hrushkovska
	pharmacy.	"public relations", personal sales and sales		D.T.,
		promotion of drugs. Merchandising in		Chukhrai I.L.
		pharmacies.	PLO-12;	
			PLO-25;	
			PLO-29;	
			PC-17	
PC-10,	Characteristics	Research external pharmacy benefits	PLO-2;	Levitska O.R.
ISW -10	of the external	(location, pricing, completeness assortmen	tPLO-4;	Hrushkovska
	advantages of	fof drugs, use of pharmaceutical principles	.PLO-5;	D.T.,
	the pharmacy.	Ethics, speed and quality of service).	PLO-6;	Chukhrai I.L.
			PLO-8;	
			PLO-11;	
			PLO-12;	
			PLO-22;	
			PLO-24;	
			PC-10;	
			PC-13	

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

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

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

Learning	Code	Method of verifying learning outcomes	Enrollment criteria
outcome code	type to		
	borrow		
Kn-1 - 1 4;	P-1 -	Current control is carried out daily, in accordance with	"5" (5 points) - the
S-1 - 1 4;	10	the specific objectives of each topic, by the immediate	student closely
C-1 - 1 4;	CPC-1	supervisor from the base of practice, who approves the	connects the theory
AB-1 -14	- 10	implementation of practical skills in the student's	with practice and
		practice diary. In the process of monitoring the	correctly
		acquisition of practical skills, students are	demonstrates the
		recommended to use the following tools for	implementation of
		diagnosing the level of training: performing practical	practical skills, fully
		tasks, modeling situations, conducting research,	completed the tasks

explaining and evaluating their results. During the provided by the assessment of mastering each topic for the current program of educational activity of the student, grades are given on practice; complied the 4th point (national). This takes into account all with the rules of types of work provided by the discipline program. The internal labor student must receive a grade from each topic for regulations and safety further conversion of grades into points on a multi-rules in force in the

point (200-point) scale.

pharmacy, all types of work, production operations and tasks provided by the program of practice, performed honestly, in full, all types of work performed are recorded in the diary; "4" (4 points) - the student demonstrates the implementation of practical skills. performed all tasks provided by the program of practice, assuming minor errors; complied with the rules of internal labor regulations and safety rules in force in the pharmacy, all types of work, production operations and tasks provided by the program of practice are performed well, but not honestly enough, incompletely, types of work performed are not fully or with some errors recorded in the diary; "3" - (3 points) the student during the demonstration practical peacocks makes significant performs mistakes, only the easiest tasks, has only a mandatory minimum of research methods, incompletely completed the tasks

provided

by

the

		program of practice; violated the
		rules of internal labor
		regulations and safety
		rules, types of work,
		production operations
		and tasks provided by
		the program of
		practice, performed not completely and
		with errors, types of
		work performed not
		completely, and some
		not recorded in the
		diary;
		"2" (0 points) - the
		student during the
		demonstration of
		practical skills makes
		significant, gross
		mistakes; did not
		fulfill the tasks
		provided by the
		practice
		program; grossly
		violated the rules of
		internal labor
		regulations and safety
		rules in the
		pharmacy, types of
		work, production operations and tasks
		provided by the
		program of practice,
		not performed or
		performed with
		unacceptable errors,
		types of work
		performed not
		completely or not
		recorded in the diary
		or student diary.
	Final control	200
	Participation in work during practice / differentiated test - on a	200-point scale
evaluation		
system	4	
	traditional 4-point scale, multi-point (200-point) scale, ECTS ra	-
Conditions of admission to	The student attended all practical (laboratory, seminar) classes a	and received at least
the final	120 points for current performance	
control		
	Methods of final control	Enrollment criteria
control		Linoinnent criteria
	Criteria for assessing differentiated credit	
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offset	Differential credit in the production practice with the IMF is carried out by means of test control, which provides 8 0 test tasks with one correct answer.	The correct answer to the test task is evaluated in one
	ausks with one correct answer.	point; the minimum number of points for enrollment is 50.

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, write-offs, interference 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

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- 11. Мнушко З. М., Мусієнко Н. М., Ольховська А. Б. Практикум з менеджменту та маркетингу у фармації. Ч. І. Менеджмент у фармації: Навч. посіб. для студ. вищ. навч. закл. Х.: Вид-во НФаУ; Золоті сторінки, 2002. 144 с.
- 12. Практикум по менеджменту и маркетингу в фармации. Ч. П. Маркетинг в фармации: учеб. пособие для студентов вузов /3. Н. Мнушко, Н. М. Мусиенко, И. В. Пестун, О. Ю. Рогуля. Харьков: Изд-во НФаУ: Золотые страницы, 2004. 140 с.
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Additional

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- 2. Афанасьєв М.В., Шемаєва Л.Г., Шерлока В.С. Основи менеджменту: Навчально-методичний посібник для самостійного вивчення дисципліни / За ред. проф. М.В. Афанасьєва. Х.: ВД «ІНЖЕК», 2003. 484 с.
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12. Additional information

Responsible for the educational process at the department - Associate Professor I.Ya. Horodetska. Scientific students' research group works at the department. Practical classes are held at Pekarska st., 75. Website of the department: https://new.meduniv.lviv.ua/kafedry/kafedra-organizatsiyi-i-ekonomiky-farmatsiyi/

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