



THE SYLLABUS OF THE EDUCATIONAL COMPONENT PHARMACEUTICAL INFORMATION

(the educational component name)

for higher education applicants 3 year

educational programme “Pharmacy”

(the educational programme name)

speciality “226 Pharmacy, industrial pharmacy”

(cipher, speciality name)

area of knowledge “22 Healthcare”

(cipher, name of the area of knowledge)

master level of higher education

(name of the higher education level)

TEACHERS

Information about the teacher

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1. Name of the higher education institution and structural unit: National University of Pharmacy, Department of Social Pharmacy

2. Department address: Kharkiv, Valentynivska street, 4, 3-4th floor, phone 057-67-91-81

3. Department website: <http://socpharm.nuph.edu.ua>

4. Consultations: take place in an online format according to the teachers' schedule posted on the department's website

5. Abstract of the educational component: The implementation of Pharmaceutical Information into the educational process is associated with the need to prepare future professionals in the field of information support for pharmaceutical activities, the organizational structure of the national pharmaceutical information system, communication processes as a key element in the transmission of pharmaceutical information, and the functioning of pharmaceutical information (modern information processing technologies) in pharmacies. A pharmaceutical worker is obliged to understand the importance of pharmaceutical information as an integral part of the professional activities of practical pharmacy specialists and the awareness of the population.

6. Purpose of teaching the educational component: formation of the foundations of modern information culture in students, their assimilation of the main theoretical approaches to the study of basic categories of pharmaceutical information, the formation of knowledge, skills and abilities in the organization of information support of pharmaceutical activities, providing future specialists with the opportunity to perform functional tasks in a high-quality manner responsibilities.

7. Competencies in accordance with the educational programme:

Soft- skills / General competencies (GC):

GC 2. Ability to apply knowledge in practical situations, make reasonable decisions.

GC 4. Ability to abstract thinking, analysis and synthesis, to learn and be modernly trained.

GC 9. Skills in the use of information and communication technologies.

Hard-skills / Professional (special) competences (PC):

SC 13. Ability to demonstrate and apply in practice communication skills, fundamental principles of pharmaceutical ethics and deontology, based on the moral obligations and values, ethical standards of professional behavior and responsibility in accordance with the Code of Ethics for Pharmaceutical Workers of Ukraine and WHO guidelines.

8. Programme learning outcomes (PLO):

PLO 2. To apply knowledge of general and professional disciplines in professional activities.

PLO 4. To demonstrate the ability to independently search, analyze and synthesize information from various sources and use these results to solve typical and complex specialized tasks of professional activity.

PLO 7. To perform professional activities using creative methods and approaches.

PLO 9. To carry out professional activities using information technology, "Information Databases", navigation systems, Internet resources, software and other information and communication technologies.

PLO 12. To analyze the information obtained as a result of scientific research, summarize, systematize and use it in professional activities.

9. The status of the educational component: Elective

10. Prerequisites of the educational component: *is based on the study of the educational component Introduction to the profession; the educational component is the basis for studying the organization and economy of pharmacy, pharmaceutical marketing and management, pharmaceutical law and legislation, pharmaceutical and medical commodity science, pharmacoeconomics, social pharmacy, which involves the integration of teaching with the above-mentioned educational components for the formation of skills to apply knowledge in the process of further education and in professional activity.*

11. The scope of the educational component: 3 ECTS credits, 90 hours per educational component: 12 general lectures, 18 seminar classes, 60 individual work hours.

12. Organisation of the teaching process:**Teaching methods:**

The following methods are used:

- *explanatory (information and reproductive) method:* lecture-based learning – lectures, audio and video materials, other educational content;
- *reproductive method:* traditional seminar classes;
- *problem-based learning:* problem lecture, problem seminar/webinar, etc.; brainstorming; case-based learning – case study method; methods of interactive visualisation of the educational material – mind mapping, timeline, word clouds;
- *partially-search method:* game-based learning – simulation games, role-playing games; project-based learning; team-based learning, training course;

The content of the educational component: *the list of topics*

Content module 1. *Theoretical and applied principles of information use in pharmaceutical activity.*

Topic 1. Theoretical foundations of information support of pharmaceutical activity

Topic 2. The organizational structure of the pharmaceutical information system

Topic 3. Communication process as a key element of information transfer

Content module 2. *Practical principles of information application in pharmaceutical activity*

Topic 4. Pharmaceutical information in pharmacies

Topic 5. Pharmaceutical information as a component of the professional activity of practical pharmacy specialists

Topic 6. Pharmaceutical information as a component of public awareness

Topic 7. Pharmaceutical information as a component of scientific activity in the pharmaceutical sector of healthcare

Organisation of individual work: *individual work involves studying topics of the educational component that are not included in classroom learning, and performing tasks on these topics in order to consolidate the theoretical material.*

13. Types and forms of control:***Types and forms of control:******Current control:***

Knowledge control in each lesson (on each topic): oral survey, writing test tasks, solving situational (calculation) problems.

Control of content modules: 2 controls of content modules. Content modules control includes 10 test questions.

Conditions for admission to the control of content modules: for admission to the control of content module 1, you must have a minimum 18 points from 30 for the topics (classes) of content module 1, for the control of content module 2 – minimum is 24 from 40.

Semester control:

The form of semester control: semester credit test.

Conditions for admission to the semester control: the current rating is more than 60 points, the academic detention of missed practical classes, the fulfillment of all types of work and requirements provided for in the working programme of the educational component.

14. The assessment system for the educational component:***Assessment of the acquisition of topics of the educational component during classes:***

Assessment of the acquisition of topics of the educational component during classes			
<i>The number of the topic (lesson) of the educational component</i>	<i>The maximum number of points by topic (lesson)</i>	<i>Distribution of the maximum number of points per topic (lesson) by type of work</i>	<i>Types of work for which the applicant receives points</i>
<i>Content module 1</i>			
Topic 1.	10	4	testing
		4	solving situational problems
		2	solving problems for individual work
Topic 2.	10	4	testing
		4	solving situational problems
		2	solving problems for individual work
Topic 3.	10	4	testing
		4	solving situational problems
		2	solving problems for individual work
<i>Total points for content module 1:</i>		30	
<i>Content module 2</i>			
Topic 4.	10	4	testing
		4	solving situational problems
		2	solving problems for individual work
Topic 5.	10	4	testing
		4	solving situational problems
		2	solving problems for individual work
Topic 6.	10	4	testing
		4	solving situational problems
		2	solving problems for

			<i>individual work</i>
Topic 7.	10	4	<i>testing</i>
		4	<i>solving situational problems</i>
		2	<i>solving problems for individual work</i>
Total points for content module 2:		40	
Total points per module:		70	

The study of the educational component by higher education applicants is possible through non-formal education. Instead of performing types of work on the topic of the educational component, the following types of work of a higher education applicant can be credited:

- taking training courses or distance courses on the use of modern educational technologies on The Open University (online course “Effective communication in the workplace”) on Coursera (online course “....”), Prometheus (online course “....”) and other platforms (if there is a corresponding document on their completion, providing a copy to the teacher);
- participation in master classes, forums, conferences, seminars, webinars on the topic of the educational component (with the preparation of essays, abstracts, informational messages, etc.; it is confirmed by the program of the event, or abstracts of reports, or the corresponding certificate).

The assessment of applicants by type of work during classes:

<i>Types of work for which the applicant receives points</i>	<i>The maximum number of points</i>
<i>testing</i>	28
<i>solving situational problems</i>	28
<i>solving problems for individual work</i>	14
<i>Total points:</i>	70

The assessment during the content module control:

<i>Types of work for which the applicant receives points</i>	<i>Distribution of the maximum number of points for the content module control by type of work</i>	<i>The maximum number of points for the content module control</i>
<i>Content module 1</i>		
<i>testing</i>	15	15
<i>Content module 2</i>		
<i>testing</i>	15	15
<i>Total points for control of the content modules:</i>		30

Assessment of individual work of a higher education applicant: *specify the types of control during which individual work is assessed, and the number of points for individual work by type of work.*

For example,

during the current control: 14 points: 14 points – solving situational problems (Topic 1-7)

during the control of content module 1: cards for content module 1 include theoretical questions and test tasks on the topic 1-3

during the control of content module 2: cards for content module 2 include calculation tasks on the topic 4-7

The assessment scale of semester credit test:

When studying the educational component, several assessment scales are used: 100-point scale and undifferentiated assessment (pass/fail), two-point scale (for semester credit test) and ECTS rating scale. Results are converted from one scale to another according to the table.

Total points by a 100-point scale	ECTS rating scale	Assessment by an undifferentiated scale
90-100	A	passed

82-89	B	
74-81	C	
64-73	D	
60-63	E	
35-59	FX	failed
1-34	F	

15. Educational component policies:

Academic Integrity Policy. It is based on the principles of academic integrity given in the Regulation “On measures to prevent cases of academic plagiarism in the NUPh”. Cheating when assessing the success of a higher education applicant during control activities in practical (seminar, laboratory) classes, monitoring of content modules and semester examinations is prohibited (including using mobile devices). Abstracts must have correct text links to the literature used. Identification of signs of academic dishonesty in the written work of a higher education applicant is the basis for its disregard by the teacher.

Class attendance policy. A higher education applicant is required to attend academic studies (Regulation “On the organisation of the educational process of the NUPh”) according to the class schedule (<https://nuph.edu.ua/rozklad-zanyat/>), adhere to ethical standards of behaviour.

Policy on deadlines, academic detention, improving the rating, and eliminating academic debt. Academic detention of missed classes by a higher education applicant is carried out in accordance with the “Regulations on academic detention of missed classes by applicants and the procedure for eliminating the academic difference in the curriculum in the NUPh” in accordance with the schedule for academic detention of missed classes set at the Department. Improving the rating and eliminating academic debt on the educational component is carried out by higher education applicants according to the procedure given in the Regulation “On the procedure for assessing the learning outcomes of higher education applicants in the NUPh”. Higher education applicants are required to comply with all deadlines set by the Department for performing types of written works on the educational component. Works that are submitted in violation of deadlines without valid reasons are rated at a lower rating – up to 20% of the maximum number of points for this type of work.

Policy on challenging the assessment on the educational component (appeals). Higher education applicants have the right to appeal the assessment on the educational component obtained during control activities. The appeal is carried out in accordance with the “Regulations on appealing the results of semester control of knowledge of higher education applicants in the NUPh”.

Policy on the recognition of learning outcomes obtained through non-formal and/or informal education by higher education applicants. Higher education applicants have the right to recognise the results of training acquired in non-formal and informal education in accordance with the Regulation “On the procedure for recognising learning outcomes obtained through non-formal and/or informal education by applicants for higher education in the NUPh”.

Within the framework of academic freedom of the teacher, instead of performing types of work on the topic of the educational component, it is possible to credit a non-formal education of a higher education applicant.

16. Information and methodological support of the educational component:

Required reading	Methodological developments for classroom work (multimedia materials, lecture texts), which are posted on the website of distance learning technologies of the National Pharmaceutical University
Additional literature for in-depth study of the educational component	<ol style="list-style-type: none"> Ilardo ML, Speciale A. The Community Pharmacist: Perceived Barriers and Patient-Centered Care Communication. <i>Int J Environ Res Public Health</i>. 2020 Jan 15;17(2):536. doi: 10.3390/ijerph17020536. PMID: 31952127; PMCID: PMC7013626. Vermeir P, Vandijck D, Degroote S, Peleman R, Verhaeghe R, Mortier E, et al. Communication in healthcare: a narrative review of the literature and practical recommendations. <i>International Journal of Clinical Practice</i> 2015;69(11):1257-67 WHO. (2017). WHO Strategic Communications Framework for effective communications. Отримано з https://cdn.who.int/media/docs/default-

	source/documents/communication-framework.pdf?sfvrsn=93aa6138_0
Up-to-date electronic information resources (journals, websites, etc.) for in-depth study of the educational component	<ol style="list-style-type: none"> 1. https://compendium.com.ua/uk/ – довідник лікарських засобів 2. https://www.apteka.ua – офіційний сайт щотижневика «Аптека» 3. https://www.fip.org/ – офіційний сайт Міжнародної фармацевтичної федерації 4. https://www.who.int - офіційний сайт Всесвітньої організації охорони здоров'я 5. https://zakon.rada.gov.ua – офіційна інформаційно-пошукова система «Законодавство України» 6. nuph.edu.ua – офіційний сайт Національного фармацевтичного університету 7. www.moz.gov.ua – офіційний сайт Міністерства охорони здоров'я
Moodle distance learning system	https://pharmel.kharkiv.edu/moodle/course/view.php?id=4063

17. Material and technical support and software of the educational component: *computers for testing, a multimedia projector for lectures, Internet access; video conferencing software ZOOM, modular object-oriented dynamic learning environment MOODLE 3.9.8.*