

Odesa National Medical University
Pharmacy Faculty
International Faculty

Syllabus of the academic discipline

Practice Organization and Economics of pharmacy

Volume	180 hours (practical classes 60 hours, IWS 120 hours)/ 6 ECTS credits
Semester / Year of studying	10 th /5 th year of studying
Days, time, place	According to the timetable Department Organization and Economics of pharmacy
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Information about consultations	Consultations are held on Tuesdays from 14:30 to 16:00 and Saturdays from 9:00 to 13:00 according to the approved schedule

Communication

Communication with students will be carried out in auditorium of the department.

In case of distance learning, communication is carried out through the Microsoft Teams platform, as well as Zoom platform, through e-mail correspondence [oef@onmedu.edu.ua](mailto: oef@onmedu.edu.ua), through Viber, Telegram, WhatsApp messengers.

COURSE ANNOTATION

The object of discipline

the formation of students' system of theoretical knowledge, as well as professionally important practical skills in organizational and economic aspects of pharmaceutical activities in modern conditions.

Pre-requisites of the course

The discipline is based on student's knowledge from "Introduction in Pharmacy", "Pharmaceutical and medical commodity science", "Pharmaceutical law and legislation", "Ethics and deontology in pharmacy"

Post-requisites of the course

The discipline is the basis for continuous professional post-graduate education

Aim of the course

to promote the formation of professionally necessary knowledge, skills and abilities in accordance with the educational and qualification characteristics; create a base that determines the professional competence and general erudition of pharmacists.

Objectives of the course

The main tasks of studying the discipline are the following: generalization of documents regulating the activities of the pharmacy in accordance with the requirements of Good Pharmacy Practice and Licensing Conditions; to study the pharmaceutical supply system; taking prescriptions, taxing, issuing medicines for dispensing, communicating with patients and consumers using the principles of pharmaceutical care; to conduct all types of intra-pharmacy quality control, as well as incoming quality inspection of ready-to-use medicines; to monitor the main economic indicators of the pharmacy.

Expected results:

Program learning outcomes for the discipline:

PLO 1. To carry out professional activities in social interaction based on humanistic and moral principles; identify future professional activities as socially significant for human health.

PLO 2. Apply knowledge of general and special disciplines in professional activities.

PLO 3. Adhere to the norms of sanitary and hygienic regime and safety requirements for professional activities.

PLO 4. 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 5. Position your professional activity and personal qualities in the pharmaceutical labor market; to formulate the purposes of own activity taking into account public and commercial interests.

PLO 7. Perform professional activities using creative methods and approaches.

PLO 11. Use methods for assessing performance indicators; identify reserves to increase labor efficiency.

PLO 19. Predict and determine the impact of environmental factors on the quality of medicines and consumer characteristics of other products of the pharmacy range during their storage.

PLO 22. To calculate the main economic factors, as well as taxes and fees. Expect all types of prices (purchase and retail) for drugs and other pharmaceutical products.

PLO 23. Take into account the data of socio-economic processes in society for the pharmaceutical supply of population, determine the effectiveness and availability of pharmaceutical care in terms of health insurance and reimbursement of the drug cost

PLO 24. Promote health, including disease prevention, rational use and use of medicines. Perform your professional duties in good faith, comply with the law on the promotion and advertising of medicines. Have psychological communication skills to build trust and understanding with colleagues, doctors, patients, consumers..

PLO 29. Ensure a competitive position and effective development of pharmaceutical organizations on the basis of research work carried out on all elements of the marketing mix.

COURSE DESCRIPTION

Forms and methods of teaching

The course will be presented in the form practical classes (60 hours), independent work of students (120 hours).

Problem-based presentation, case studies, discussions, work in a computer class (testing), presentations, "business games" are used as teaching methods

Content of the course

Topic 1. Organization of pharmacies as health care institutions in accordance with the requirements of Good Pharmacy Practice (NAP)

Topic 2. Organization of prescription and over-the-counter dispensing of medicines

Topic 3. The procedure for calculating the cost of extemporaneous drugs

Topic 4. Accounting of controlled drugs, document management.

Topic 5. Organization of the activity with inventories in pharmacy

Topic 6. Accounting system in pharmacies

Topic 7. Organization of physical inventory in pharmacies

Topic 8. Financial statements of pharmacies (pharmaceutical companies)

Topic 9. Accounting systems in pharmacy. E-health system

Topic 10. Pricing of medicines and pharmaceutical commodities

Topic 11. Rules for calculation and analysis of economic indicators of pharmacies and pharmaceutical companies

Topic 12. Analysis and planning of economic activity in pharmacies

LIST OF RECOMMENDED LITERATURE

Basic

1. Texts of lectures on the discipline "Organization and economics in pharmacy" / LM Unhurian, OI Bieliaieva, IV Vyshnytska, OO Alexandrova. - Odessa: ONMedU, 2018. - 107 p.

2. Pharmaceutical Law and Legislation : the textbook for applicants for higher education / A.A. Kotvitskaya, I.V. Kubarieva, A.V. Volkova et al. Kharkiv : NUPh : Golden Pages, 2019.204 p.

3. Organization of pharmaceutical aid to the population / Under ed. prof. Nemchenko A.S. - Kharkov, 2016.- Unit 1, 116 p.

4. Introduction into the pharmacy: teach. manual / Under the general editorship: A.S. Nemchenko. - Kh.: NUPh, 2016 - 115 p.

Additional

1. Comorbidities as factors influencing choice of drug in arterial hypertension therapy/ Vyshnytska Iryna, Unhurian Liana, Bieliaieva Oksana, Pietkova Iryna. Medical theory: collective monograph / Bulavenko Olga, Muntian Olga, Muntian Maksym, Yarovenko Anatolii, etc. International Science Group. Boston: Primedia eLaunch, 2020. P. 68-76. Available at: DOI: 10.46299/isg.2020.MONO.MED.II

2. Methodical approaches to teaching pharmacoeconomics at the faculty of pharmacy/ Vyshnytska Iryna, Unhurian Liana, Bieliaieva Oksana, Smyrnova Olha. Scientific foundations of modern pedagogy: collective monograph / Bets I., Bets Yu., Filippov M., etc. International Science Group. Boston: Primedia eLaunch, 2020. P. 76-82 Available at: DOI: 10.46299/isg.2020.MONO.PED.II

3. Unhurian L., Bielyaieva O., Vyshnytska I., Suschuk N., Petkova I. (2018) Implementation of Standards of Good Pharmacy Practice in the World: A Review. Asian Journal of Pharmaceutics. Vol. 12. N 1 (Suppl). Pp. 42 - 46.

4. Unhurian L., Bielyaieva O., Burenkova N. (2017) Analysis of the Modern Pharmaceutical Market of Anxiolytic Drugs in Ukraine. International Journal of Pharmaceutical Sciences Review and Research. Vol. 43 N 1. Pp. 169 – 172.

5. Standarts for quality of pharmacy services <http://fip.org/files/fip/Statements/latest/Dossier%20004%20total.PDF>

6. Good pharmacy practice in community and hospital pharmacy settings <http://apps.who.int/medicinedocs/documents/s21088en/s21088en.pdf>

7. International health systems http://www.pnhp.org/facts/international_health_systems.php?page=all

8. The legal and regulatory framework for community pharmacies in the WHO European Region <https://apps.who.int/iris/bitstream/handle/10665/326394/9789289054249-eng.pdf>

9. Asset Management Ratios <https://courses.lumenlearning.com/boundless-finance/chapter/asset-management-ratios/>

10. Financial Analysis in Pharmacy Practice E-resource <https://pdfs.semanticscholar.org/3104/8f567e76089ed7d33c5224c3c4c0faec06bf.pdf>

Information resources, including the Internet

1. Departments' site: http://info.odmu.edu.ua/chair/economy_pharmacy/files

2. Ministry of Health of Ukraine http://www.moz.gov.ua/ua/portal/dn_20050719_360.html

3. World Health Organization <http://www.who.int/>

4. National Scientific Medical Library of Ukraine <http://library.gov.ua/>
National Library of Ukraine named after V.I. Of Vernadsky
<http://www.nbu.gov.ua/>

EVALUATION

There are various forms of control for classes (oral, written, combined, testing, practical skills, etc.). The results of the academic progress for students exhibited in the form of evaluation on a national scale, 200-point scale, ECTS and have standardized generic assessment criteria:

Criteria for assessing the student's current learning activity

<p>grade "excellent" ("5") grade "excellent" ("5") is given to a student who systematically worked during the term, has showed versatile and deep knowledge of the program content during the graded test, is able to successfully complete the tasks provided for by the program, has mastered the content of the main and additional literature, realized the relationship of individual sections of the discipline, their importance for the future profession, identified creative ability to understand and use educational and program materials, showed the ability to independently replenish and update knowledge; high level of competence (creative)</p>
<p>grade "good" ("4") is given to a student who has revealed complete knowledge of the educational and program materials, successfully completes the tasks provided for by the program, has mastered the basic literature recommended by the program, has shown a sufficient level of knowledge in the discipline and is capable of independently updating and replenishing them in the course of further education and professional activity; the level of competence is sufficient (constructive - variation)</p>
<p>grade "satisfactory" ("3") is given to a student who has revealed knowledge of the basic educational and program materials in the amount necessary for further training and subsequent work in the profession, copes with the tasks provided for by the program, made some mistakes in the answers on the exam and when performing the exam tasks, but has the necessary knowledge to overcome mistakes made under the guidance of a scientific and pedagogical worker; the level of competence is medium (reproductive).</p>
<p>grade "unsatisfactory" ("2") is given to a student who did not reveal sufficient knowledge of the basic educational and program materials, made fundamental mistakes in performing the tasks provided for in the program, cannot use knowledge in further training without the help of a teacher, could not master the skills of independent work, the level of competence is low (reciprocal-productive).</p>

Current control

Current control is carried out at each practical class through oral questioning or written control. After studying each section, based on the control of theoretical knowledge, practical skills and abilities, the control of the acquisition of practical skills is carried out. The student's current educational activity is assessed in a practical class on a 4-point (traditional) scale.

Final control

The form of the final control is a graded test, which is assessed on a 4-point scale.

A graded test is carried out at the last practical class based on the results of the final interview with the obligatory performance by the student of all types of work stipulated by the work curriculum (subject to attending all classes, receiving a positive assessment to control the development of practical skills) and rated for current educational activities on average not less 3.00.

The means of diagnosing the assimilation of the material is the control of the implementation of practical skills (2 situational tasks), an oral answer to 2 theoretical questions.

The grade received for the answer on the graded test and the average current academic performance in the study of the discipline are used to calculate the arithmetic mean, which is the overall grade for the discipline.

In the student's record book, the teacher enters the grade for the discipline on the traditional and 200-point scale.

A multi-point scale characterizes the actual progress of each student in mastering the academic discipline. The conversion of the traditional grade in the discipline into a 200-point grade is carried out by the information and computing center of the university by the "Contingent" program according to the formula:

$$\text{grade point average (current / by discipline) x 40}$$

national grade	points
«5»	185-200
«4»	151-184
«3»	120-150

ECTS scale

The ECTS rating scale evaluates the achievements of students in the discipline who study in one course of one specialty, according to the points they received, by ranking, namely:

ECTS score	Statistical indicator
"A"	top 10% of students
"B"	next 25% of students
"C"	next 30% of students
"D"	next 25% of students
"E"	the remaining 10% of students

The ECTS scale establishes the student's belonging to the group of the best or worst among the reference group of fellow students (faculty, specialty), that is his rating. When converting from a multi-point scale, as a rule, the boundaries of grades "A", "B", "C", "D", "E" do not coincide with the boundaries of grades "5", "4", "3" on the traditional scale. The "A" grade on the ECTS scale cannot be equal to the "excellent" grade, and the "B" grade - the "good" grade, etc.

Students who have received grades "FX" and "F" ("2") are not included in the list of ranking students. Such students, after retaking, automatically receive an "E" score.

The mark "FX" is given to students who have scored the minimum number of points for the current educational activity, but who are not credited with the final

control. Grade "F" is given to students, attended all classroom lessons in the discipline, but did not score an average score (3.00) for the current educational activity and were not admitted to the final control.

Independent work of students.

Independent work in the study of the discipline is provided by methodological developments for the independent work of students, visual teaching aids (presentations, educational films etc.), the information resource of the department, the topic of independent tasks for each task, algorithms for the implementation of practical skills, algorithms for self- and mutual control of knowledge

Independent work of students, which is provided by the topic of the class along with classroom work, is assessed during the current control of the topic in the corresponding practical class. The assimilation of topics that are taken out only for independent work is checked during a graded test.

COURSE POLICY

Deadline and retake policy

Students for education are expected to attend all lectures and practical classes. If they missed classes, it is necessary to make-up them (according to the schedule posted on the information stand of the department and according to the permission of the dean's office, if necessary).

The retake of the control of the acquisition of practical skills is carried out during the semester on an individual basis with the determination of the time of the training.

Retake of unsatisfactory grades is carried out during the term of studying the discipline, provided that the average score for the current educational activity is less than 3.00 (carried out according to the schedule posted on the information stand of the department).

Academic Virtue Policy

Respect for academic virtue by education seekers includes:

- independent fulfillment of educational tasks, tasks of current and final control (current controls and discipline exam) of learning outcomes (for persons with special educational needs, this requirement is applied taking into account their individual needs and capabilities);

- links to sources of information when using ideas, developments, statements, information;

- provision of reliable information about the results of their own (scientific, creative) activities, the research methods used and sources of information.

It is unacceptable in educational activities for participants in the educational process to use prohibited auxiliary materials or technical means (crib notes, earpieces, phones, smartphones, tablets, etc.) during control events.

For violation of academic virtue, education seekers may be held liable for such academic responsibility

- decrease in the results of assessment (control work, exam);

- re-passing the assessment (test, exam);
- appointment of additional control measures (additional individual tasks, control works, tests, etc.).

Attendance policy

Attendance at lectures and practical classes is compulsory. If you are more than 15 minutes late, the lesson is considered missed and requires working out.

Mobile devices

During practical exercises, the use of a smartphone, tablet or other device for storing and processing information is allowed only with the permission of the tutor.

When conducting any form of control, the use of mobile devices and their accessories is strictly prohibited.

Audience behavior

During the classes it is allowed: to leave the audience for a short time, if necessary and with the permission of the teacher; photograph presentation slides; actively participate in the class.

During the lessons it is prohibited: to eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required), smoking, drinking alcoholic and low-alcohol drinks or drugs; use obscene language or use words that offend the honor and dignity of colleagues and faculty; gamble; damage the material and technical base of the university (spoil inventory, equipment; furniture, walls, floors, litter premises and territories), make noise, shout or listen to loud music in classrooms and even in the corridors during classes.