

**Odessa National Medical University**  
**Faculty international**  
**Department of Organization and Economics of Pharmacy**

**Syllabus course**  
**International marketing in pharmacy**

<b>Volume</b>	60 hours (lectures 10 hours, practical training 30 hours, IWS 20 hours)/ 2 ECTS credits
<b>Semester, year of study</b>	VIII semester of the 4th year of study
<b>Days, time, place</b>	According to the timetable Department Organization and Economics of pharmacy
<b>Teacher (s)</b>	Petkova Irina Borisovna
<b>contact number</b>	+380674829183
<b>E-mail</b>	irinapetkovaa@ukr.net
<b>Workplace</b>	st. Malinovsky, 37, 2nd floor, Department of Organization and Economics of Pharmacy, room 201
<b>Consultations</b>	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 can be carried out by E-mail of the discipline teacher; Microsoft Teams and Zoom platforms; messengers Viber, Telergram, WhatsApp.

### **ANNOTATION OF THE COURSE**

#### ***Item study discipline***

The subject of the regulatory discipline is the international activities of pharmaceutical companies.

#### ***Prerequisites and post-requisites of the course (Place of discipline in the educational program):***

Interdisciplinary connections in the study of the academic discipline "International Marketing in Pharmacy" are based on general knowledge in such academic disciplines as "Economic Theory", "Sociology", "Organization and Economics of Pharmacy", "Introduction to Pharmacy", "Pharmaceutical Law and Legislation", " Fundamentals of Economics "" Drug Technology "," Ethics and Deontology in Pharmacy "," Information Technologies in Pharmacy ".

The discipline lays the foundations for students to study pharmaceutical management and marketing, pharmaceutical and medical commodity science, pharmacoconomics, social pharmacy, providing for the integration of teaching

with these disciplines to form the skills to apply knowledge of international marketing in pharmacy in the process of further education and in professional activity.

***Purpose of the course.***

The purpose of teaching the academic discipline "International Marketing in Pharmacy" is to form students' system of knowledge about training students in the basic categories of marketing, providing future specialists with the possibility of high-quality performance of functional duties, entrepreneurial activity in market conditions, as well as the implementation of general and marketing management of pharmaceutical enterprises, wholesale companies and pharmacies with various forms of business outside of Ukraine.

***Discipline objectives:***

The main tasks of studying the discipline are: the ability to solve typical and complex specialized tasks and practical problems in professional pharmaceutical activity using the provisions, theories and methods of fundamental, chemical, technological, biomedical and socio-economic sciences; integrate knowledge and solve complex issues, formulate judgments with insufficient or limited information; clearly and unambiguously convey their conclusions and knowledge, reasonably justifying them, to a professional and non-professional audience.

***Expected results:***

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. Observe the standards of the sanitary and hygienic regime and safety requirements in the implementation of 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 activities and personal qualities in the pharmaceutical labor market; formulate the goals of their own activities, taking into account public and industrial interests.

PLO 6. Argue information for making decisions, be responsible for them in standard and non-standard professional situations; adhere to the principles of deontology and ethics in professional activities.

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

PLO 8. Carry out professional communication in the state language, use the skills of oral communication in a foreign language, analyzing texts of a professional orientation and translate foreign language sources of information

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

PLO 12. Analyze information obtained as a result of scientific research, generalize, systematize and use it in professional activities.

PLO 14. Determine the advantages and disadvantages of drugs of various pharmacological groups, taking into account their chemical, physicochemical, biopharmaceutical, pharmacokinetic and pharmacodynamic characteristics. Recommend over-the-counter medicines and other pharmacy products to consumers with the provision of advice and pharmaceutical care.

PLO 15. Provide pre-medical care to patients in emergency conditions and victims in extreme situations.

PLO 16. To determine the influence of factors influencing the processes of absorption, distribution, deposition, metabolism and excretion of the drug and are due to the state, characteristics of the human body and the physicochemical properties of drugs.

PLO 20. To carry out a set of organizational and managerial measures to provide the population and health care institutions with medicines and other goods of the pharmacy range. Maintain records in pharmacies, administrative office work, merchandise analysis processes.

PLO 21. Calculate the main economic indicators of the activity of pharmacies, as well as taxes and fees. To form all types of prices (wholesale, sale, purchase and retail) for medicines and other goods of the pharmacy range.

PLO 22. Exercise management of pharmaceutical organizations and determine its effectiveness using management functions. Make management decisions based on the formed leadership and communication skills of pharmaceutical personnel in the strategic planning of enterprises.

PLO 23. Consider data on socio-economic processes in society for pharmaceutical provision of the population, determine the effectiveness and availability of pharmaceutical care in the context of health insurance and reimbursement of the cost of drugs.

PLO 24. Plan and implement professional activities based on the regulatory legal acts of Ukraine and recommendations of good pharmaceutical practices.

PLO 28. Organize and carry out rational procurement of medicinal plant materials. To develop and implement measures for the protection, reproduction and rational use of wild species of medicinal plants.

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

PLO 31. Conduct quality control of medicines; draw up quality certificates for a batch of a medicinal product and a certificate of analysis taking into account the requirements of the current regulatory documents, the State Pharmacopoeia of Ukraine and the results of the quality control carried out. Develop specifications

and quality control methods in accordance with the requirements of the current State Pharmacopoeia of Ukraine.

PLO 32. Determine the main organoleptic, physical, chemical, physicochemical and pharmaco-technological indicators of medicines, substantiate and select methods for their standardization, carry out statistical processing of the results in accordance with the requirements of the current State Pharmacopoeia of Ukraine.

## **DESCRIPTION OF THE COURSE**

### ***Forms and methods of teaching***

The course will be presented in the form of lectures (10 hours) and practical lessons (30 hours), organization of students' independent work (20 hours). As teaching methods, problem presentation, case studies, discussions, work in a computer classroom (testing in the moodle system), electronic (review, problematic) lectures, presentations, business games, classes with the use of computer technology (situational tasks, test tasks) are used ...

### ***Content of the academic discipline***

Topic № 1. The essence of international pharmaceutical marketing and the characteristics of its environment.

Topic № 2. Methods and forms of entering the international pharmaceutical market, international pharmaceutical marketing management.

Topic № 3. Solution for international drug marketing. Pricing in the international pharmaceutical marketing system.

Topic №. 4. Distribution and promotion of medicines on the international market. Organization of non-prescription drug dispensing

Topic №. 5. Representative offices of pharmaceutical companies are an important subject of the international market.

### ***List of recommended literature***

#### ***Main literature***

1. International marketing in pharmacy. Lecture text / prof. Unguryan LM, Pietkova I.B. etc.; ONMedU- Odessa, 2020, 120p.
2. International marketing in pharmacy. Training manual /prof. L.M. Unguryan, IB Petkova and others.; ONMedU- Odessa, 2018, 160p.
3. Judith Grice Global pharmaceutical marketing. A practical guide to codes and compliance. / Great Britain by TJ International, Padstow, Cornwall, 2018. - 217 p.
4. Peter Gentsch AI in Marketing, Sales and Service How Marketers without a Data Science Degree can use AI, Big Data and Bots.Palgrave Macmillan, 2019. URL: <https://doi.org/10.1007/978-3-319-89957-2>
5. Mondher Toumi Introduction to market access for pharmaceuticals. CRC Press Taylor and Francis Group, 2017. 175 p.

#### ***Additional literature:***

6. Management and Marketing in Pharmacy [Electronic resource] : the textbook foreign students of higher pharmaceutical schools : in 2 parts / Z. Mnushko [at al.], ed. by prof. Z. Mnushko ; National University of

- Pharmacy. – Electronic text data. – Kharkiv : publishing center “Dialog”, 2016. – Part II : Marketing in Pharmacy. – electronic text data. 320 p.
7. Pharma 2020: Marketing the future/ Published by Price waterhouse Coopers. 30 p.
  8. Reem K. Al-Essa, Mohammed Al-Rubaie, Stuart Walker, Sam Salek Pharmaceutical Regulatory Environment Challenges and Opportunities in the Gulf Region, 2015. 236 p.

### ***Information resources***

9. Legislation of Ukraine [Electronic resource]. - Access mode: <http://zakon.rada.gov.ua/laws>
10. Normative-directive documents of the Ministry of Health of Ukraine [Electronic resource]. - Access mode: / [http:// mozdocs.kiev.ua](http://mozdocs.kiev.ua)
11. Research and analysis of the pharmaceutical market of Ukraine. <http://morion.ua>
12. Ministry of Health of Ukraine [Electronic resource]. - Access mode: <http://www.moz.gov.ua>
13. State form of medicines. Issue twelfth. / Ministry of Health of Ukraine, 2020. - / Internet resource -<http://www.moz.gov.ua/ua/portal/>
14. State Register of Medicines of Ukraine. [Electronic resource]. - Access mode: <http://www.drlz.com.ua/ibp/ddsite.nsf/all/shlist?opendocument>.
15. Compendium online. [Electronic resource]. - Access mode: <https://compendium.com.ua/bad/>.
16. Weekly "Pharmacy" [Electronic resource]. - Access mode: <https://www.apteka.ua/>.
17. Search database of drugs [Electronic resource]. - Access mode: <https://tabletki.ua/uk/>.
18. Search database of drugs [Electronic resource]. - Access mode: <http://likicontrol.com.ua/>.
19. Search database Medscape [Electronic resource]. - Access mode: Medscape <https://www.medscape.com/pharmacists>.
20. Regulatory base of NTA of Ukraine [Electronic resource]. - Access mode: <https://www.hta.ua>
21. European medicine agency. [Electronic resource]. - Access mode: <http://www.ema.europa.eu/ema>
22. Food and drug administration [Electronic resource]. - Access mode: <http://www.fda.gov/>

## **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**

**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 exam, 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)

**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)

**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).

**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).

### **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 final control in the form of tests is assessed on a two-point scale:

- the mark "passed" is given to a student who has completed the curriculum of the discipline and has no academic debt; the level of competence is high (creative).

- the mark "not passed" is given to a student who has not completed the curriculum of the discipline, has academic debt (average score below 3.0 and / or missing classes), the level of competence is low (receptive-productive). 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 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 and skills, test tasks for each practical class.

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 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.