

**Odessa National Medical University**  
**International Faculty**  
**Department organization and economics of pharmacy**

**Syllabus of the academic discipline**

**Logic**

<b>Volume</b>	90 hours (lectures - 15 hours, seminars - 30 hours), independent work of students - 45 hours)/ 3 ECTS credits
<b>Semester, year of study</b>	1 <sup>st</sup> / 1 <sup>st</sup> year of study
<b>Days, time, place</b>	According to the timetable Department Organization and Economics of pharmacy
<b>Teacher (s)</b>	Sen. Teacher Smirnova Olga Vyacheslavivna Assoc.Dep Belyaieva Oksana Ivanivna
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<b>Address</b>	Department of Organization and Economics of pharmacy; M. Malinovskogo str. 37, Odesa city
<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**

E-mail [oef@onmedu.edu.ua](mailto: oef@onmedu.edu.ua); Microsoft Teams, Zoom; messengers: Viber, Telegram, WhatsApp

**COURSE ANNOTATION**

*The subject of the discipline*

Logic is the systematic study of valid rules of inference, i.e. the relations that lead to the acceptance of one proposition (the conclusion) on the basis of a set of other propositions (premises). More broadly, logic is the analysis and appraisal of arguments.

*Pre-requisites and post-requisites of the course:*

Logic as an academic discipline:

is based on general knowledge of such disciplines as "Ukrainian language", "Philosophy", "History of Ukraine" The discipline lays the foundations for the study of the following disciplines: pharmaceutical management and marketing, organization and economics of pharmacy, social pharmacy. which provides for the integration of teaching with these disciplines to develop skills in further education and professional activities.

**Aim of the course**

Logic are characterized by particular awareness of current problems related to knowledge, sciences and technology. The main goal is to further the knowledge of

present day problems related to knowledge, sciences and technology from the different perspectives of Logic and Philosophy of Science and its related disciplines.

### **Objectives of the course:**

1. To introduce Logic as an academic discipline to students.
2. To teach students to acquire pleasures in logical thinking.
3. To inculcate critical and systematic thinking in student's mind as well as common stakeholder in general.
4. To create awareness about the significance of logical thinking for academics and life in general, in students and common stakeholders.

### **Expected results:**

#### *Program learning outcomes for the discipline:*

- PLO 2. Apply knowledge of general and special disciplines in 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 with creative methods and approaches.

## **COURSE DESCRIPTION**

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

The training course consists of lectures (15 hours) and practical classes (30 hours), independent work of students (45 hours).

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

### ***Content of the course***

- Topic 1. Logic as an academic discipline
- Topic 2. The Origins of Logic
- Topic 3. Concepts in Logic
- Topic 4. Modern understanding of propositions in Logic
- Topic 5. Fundamental laws of Logic
- Topic 6. Logic as the study of Inference. Inference and Fallacies.
- Topic 7. Logical Argument

## **LIST OF RECOMMENDED LITERATURE**

### ***Basic:***

1. Logic: texts of lectures for students of specialty 226 "Pharmacy. Industrial pharmacy" / Unhurian L.M., Vyshnytska I.V., Bielyaieva O.I. etc.; ed. L. Unhurian. Odessa: ONMedU, 2021. 60 p.

2. Logic in Action –New Edition, November 23, 2016– Johan van Benthem, Hans van Ditmarsch, Jan van Eijck, Jan Jaspars <http://www.logicinaction.org/docs/lia.pdf>

3. Introduction to Logic Irving M. Copi Carl Cohen Kenneth McMahon Fourteenth Edition <http://www.uop.edu.pk/ocontents/Book-Introductiontologic.pdf>

#### *Additional*

1. AN INTRODUCTION TO LOGIC AND ITS PHILOSOPHY *Informational resources* [https://www.sfu.ca/~swartz/pw/text/pw\\_all.pdf](https://www.sfu.ca/~swartz/pw/text/pw_all.pdf)

2. [Райхерт К. В.](#) Логіка та (пост)(не)класична раціональність [Текст] / К. В. Райхерт // Інтегративна антропологія : міжнар. мед.-філософ. журн. / Одес. держ. мед. ун-т. - О. : ОДМУ, 2015. - № 2. - С. 19-22

3. [Вороненко Ю. В.](#) Логіка використання портфоліо в забезпеченні якості післядипломної медичної освіти та безперервного професійного розвитку лікаря. Аналітичний огляд [Текст] / Ю. В. Вороненко, О. П. Мінцер // Медична інформатика та інженерія. - Тернопіль, 2017. - N 3. - С. 5-13

4. Юридическая логика: коммуникативная концепция : монография / Л.Н. Сумарокова. – Одесса : «Фенікс», 2015. – 204 с.

## **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, generalized assessment criteria:

### *Criteria for assessing the student's current learning activity*

- the mark "excellent" ("5") is given to a student who has systematically worked, has shown versatile and deep knowledge of the program material, is able to successfully complete the tasks provided 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, showed creative abilities in understanding and using educational and program material, showed the ability to independently update and replenish knowledge; the level of competence is high (creative);

- the mark "good" ("4") is given to a student who has shown complete knowledge of the educational and program material, successfully fulfills the tasks provided 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 replenishing and updating them in the course of further education and professional activities; the level of competence is sufficient (constructive and variable);

- the mark "satisfactory" ("3") is given to a student who has shown knowledge of the basic educational and program material in the amount necessary for further study and subsequent work in the profession, copes with the tasks provided by the program, made some mistakes in answers, but has the necessary knowledge to overcome the mistakes made under the guidance of a scientific and pedagogical worker; competence level - average (reproductive);

- the mark "unsatisfactory" ("2") is given to a student who did not reveal sufficient knowledge of the basic educational and program material, made fundamental mistakes

in performing the tasks provided for in the program, cannot use knowledge in further training without the help of a teacher, and could not master the skills of independent work; the level of competence is low (receptive-productive).

***The procedure for assessing the student's educational activity:***

***- assessment of current academic performance of the discipline***

Current academic performance of the discipline's topics is evaluated according to the traditional 4-point scale. In a practical lesson, students should be interviewed at least once every 2-3 practical lessons (no more than 75% of students). At the end of the semester, the average number of students' grades in a group should be the same.

At the end of the study of the discipline, the current performance is calculated - the average current score (the arithmetic mean of all current grades on the traditional scale, rounded to two decimal places). To increase the average score in the discipline, the current marks "3" or "4" are not re-evaluated.

***- assessment of independent work of students***

The task of independent work of students is to obtain additional information for a more in-depth study of the discipline in practical classes. Independent work of students, which is provided by the topic of the lesson is assessed during the current control of the topic in the corresponding lesson.

***- final control of knowledge by discipline***

The final control in the form of final test 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; , their average grade of current performance is 3.00 or more, in the last lesson they receive a test, which is set as "passed"; 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).

Conversion of the traditional national assessment into a multi-point one (maximum 200 points) is required. If a student receives a minimum grade point average of 3.00 in current performance, even if there are unsatisfactory grades that have not been completed, he / she receives a discipline test.

**Converting Traditional Discipline Assessment on a multi-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:

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

National Assessment	Points
"5"	185-200
"4"	151-184

"3"	120-150
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### on the 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.

## 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.