

MINISTRY OF HEALTH OF UKRAINE

ODESSA NATIONAL MEDICAL UNIVERSITY

Department of Philosophy, Bioethics and Foreign Languages



APPROVED by

Vice-rector for Scientific and Pedagogical work

Eduard BURIACHKIVSKYI

September 1, 2023

**WORK PROGRAM IN THE COURSE  
ENGLISH FOR PROFESSIONAL PURPOSES**

**Level of higher education:** the second (Master's)

**Field of knowledge:** 22 "Health care"

**Specialty:** 222 "Medicine"

**Educational and professional program:** Medicine

Odesa - 2023

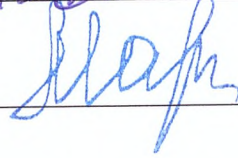
The Work Program (WP) is based on the educational-professional program (EPP) "Medicine" for the second degree (Master's) level of professional training in Specialty 222 Medicine, Field of Knowledge 22 Health Care, approved by the Academic Council of ONMedU (Minutes N 8, dated June 29, 2023).

Developers:

Veronika Ye. Abramovych, Department's associate professor, Cand. of Ped. Sciences;  
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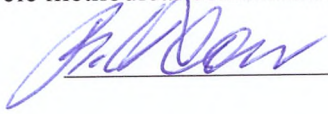
The Work Program is approved at the meeting of the Department of Philosophy, Bioethics and Foreign Languages,  
Minutes No 1, dated August 28, 2023.

Head of the Department  Volodymyr KHANZHY

Agreed with the EPP guarantor  Valeriia MARICHEREDA

Approved by the Subject Cycle Methodical Committee on Humanities of ONMedU,  
Minute N 1, dated August 28, 2023.

Chairman of the subject cycle methodical commission on humanities of ONMedU

 Volodymyr KHANZHY

## 1. Description of the Course

Indicators	Field of knowledge, Specialty, Level of higher education	Features of the academic discipline
Total amount:	22 Health care	<i>Full-time studies</i>
ECTS Credits: 3		<i>Compulsory</i>
Hours: 90	222 Medicine	<i>Year of training: 3</i>
Content modules: 5	The second (Master's)	<i>Semester 5</i>
		<i>Lectures (0 h.)</i>
		<i>Seminars (0 h.)</i>
		<i>Practical classes (60 h.)</i>
		<i>Labs (0 h.)</i>
		<i>Self-study (30 h.)</i>
		<i>Individual tasks (0 h.)</i>
		<i>Form of final control – Graded test</i>

## 2. Purpose and objectives of the course, competencies, and program learning outcomes.

**Purpose:** Mastering the knowledge and professional competencies in English within the spheres and topics outlined in the educational program by the higher education seeker of medicine which involves advanced development of a foreign language communicative proficiency.

### **Objectives:**

1. Building up the abilities and skills in English communication within the spheres, topics, and situations defined by the current EPP
2. Improving the skills of understanding, critical analysis and translation of authentic professional texts.
3. Mastering the ability to express one's thoughts, feelings and attitudes; to apply appropriate communication strategies according to different needs in professional activities in English.

The course focuses on building up components of the following competencies:

- **Integral (IC)**

Ability to solve typical and complex problems, including those of a research and innovation nature in the field of medicine. Ability to continue learning with a high degree of autonomy.

- **General (GC):**

GC7 – Ability to cooperate in a team.

GC8 – Ability for interpersonal cooperation.

GC9 – Ability to communicate in a foreign language.

GC10 – Ability to use information and communication technologies.

GC12 – Determination and persistence in relation to assigned tasks and assumed responsibilities.

GC15 – Ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society, and in the development of society, technology and technologies, to use various types and forms of motor activity for active recreation and leading a healthy lifestyle.

- **Special (SC):**

SC1 – Ability to collect medical information about the patient and analyse clinical data.

SC16 – Ability to evaluate and ensure the quality of the work performed.

SC21 – Ability to clearly and unambiguously convey one's own knowledge, conclusions and

arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying.

SC25 – Adherence to professional and academic integrity, being responsible for the reliability of the obtained scientific results.

**Program learning outcomes (PLO):**

PLO21 – Searching for the necessary information in the professional literature and databases of other sources, analysing, evaluating and application of this information.

PLO25 – Conveying one’s knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists clearly and unambiguously.

PLO27 – Fluent communication in the state language and English, both orally and in writing to discuss professional activities, research and projects.

**At the end of the course, a higher education seeker must:**

***know:***

- terminology and grammatical constructions for expressing thoughts; stylistic features of medical English;
- rules for writing messages, opinions, explanations, definitions, reviews, reports, abstracts, etc., which have semantic and logical completeness and correspond to norms of medical records’ management;
- peculiarities of communication in professional and social spheres.

***be able to:***

- communicate with patients and colleagues in English at a highly professional level, both orally and in writing;
- operate and actively use a foreign language in the process of synthesis and analysis of various sources of information;
- read, translate (from English to Ukrainian and vice versa), interpret and analyse authentic English professional materials with annotations and summaries of scientific medical publications;
- keep medical records in English.

### **3. COURSE CONTENT**

#### **MODULE I. HUMAN ANATOMY**

##### **Topic 1. Normal Anatomy**

Word-forming elements of Greek-Latin origin in medical terminology. Medical terms related to normal anatomy: translation, features of word formation, plural forms of nouns, and adjectives of Greek-Latin origin. Translation, critical analysis of cases, and description of human anatomical structures in English.

#### **MODULE II. BIOLOGY AND HISTOLOGY**

##### **Topic 2. Biology**

Genetic variation by genotype and phenotype, types of mutations. Medical terms related to biology: translation, features of word formation, plural forms of nouns and adjectives of Greek-Latin origin. Translation, critical analysis of genetic cases, and specific medical literature. in English

##### **Topic 3. Histology**

Medical terms in histology: translation, features of word formation, collocations. Translation, critical analysis of situational tasks and cases in histological studies of normal and pathological structures in the human body at the microscopic level, and description of types of tissues, layers, and organelles according to their composition and functions in English.

### **MODULE III. PHYSIOLOGY**

#### **Topic 4. Normal physiology**

Medical terms related to normal physiology: translation, peculiarities of word formation, analysis of elements of Greek-Latin origin. Translation, critical analysis of cases, and description of life processes in the human body at the systemic and organismal levels in English.

#### **Topic 5. Morbid physiology**

Embolism, its types, pathogenesis, and consequences. Medical terms related to pathological physiology: translation, peculiarities of word formation, analysis of Greek-Latin origin elements, their use in professional sources of information, and professional communication. Development of skills to evaluate the psychomotor and physical development of a patient, analysis of the laboratory and instrumental studies' results, and evaluation of the diagnosis in English. Description of typical pathological processes in cirrhosis and allergies. Compilation of abstracts and summaries in scientific medical publications

### **MODULE IV. BIOCHEMISTRY AND MICROBIOLOGY**

#### **Topic 6. Biochemistry**

Enzymes, Vitamins and minerals. Medical terms related to biological chemistry: translation, peculiarities of word formation, analysis of elements of Greek-Latin origin. Translation, critical analysis of cases, and description of biochemical processes of vital activity in the human body and their disorders in English. Development of analytical and searching reading and translation skills. Presentation of clinical cases of endocrine and nervous disorders.

#### **Topic 7. Microbiology**

Pathogens: types and their ways of transmission. Medical terms related to microbiology: translation, peculiarities of word formation, analysis of elements of Greek-Latin origin, their use in professional sources of information, and professional communication. Development of skills in analyzing the results of microbiological research in English. Development of analytical and searching reading and translation skills. Presentation of clinical cases of infectious diseases.

### **MODULE V. TREATMENT**

#### **Topic 8. Pharmacology**

Translation, critical analysis of situational tasks, clinical cases and description of pharmacological therapy specifics in English. Determination of drugs' interactions, indications for prescribing, side effects, contraindications, etc. for certain drugs. Explanation to a patient of a pharmacological treatment course. Peculiarities of drug administrations in GI diseases and antibiotics.

#### 4. Course Planning

Topics	Hours				
	Total	by each form of study			
		Lectures	Seminars	Practicals	Labs
<i>Module I. Human Anatomy</i>					
Topic 1. Anatomy	12			8	4
<i>Module II. Biology and Histology</i>					
Topic 2. Biology	6			4	2
Topic 3. Histology	5			4	1
<i>Module III. Physiology</i>					
Topic 4. Normal Physiology	9			6	3
Topic 5. Morbid Physiology	15			10	5
<i>Module IV. BIOCHEMISTRY AND MICROBIOLOGY</i>					
Topic 6. Biochemistry	9			6	3
Topic 7. Microbiology	12			8	4
<i>Module V. TREATMENT</i>					
Topic 8. Pharmacology	18			12	6
Graded test	4			2	2
<b>Total</b>	<b>90</b>			<b>60</b>	<b>30</b>

#### 5. Topics of lectures / seminars / practicals / labs

##### 5.1. Topics of lectures

Lectures are not provided.

##### 5.2. Topics of seminars

Seminars are not provided.

##### 5.3. Topics of practical classes

No	Topic	Hours
1.	<i>Topic 1. Practical class 1. Anatomy.</i> Word-forming elements of Greek-Latin origin in English medical terminology.	2
2.	<i>Topic 1. Practical class 2. Anatomy.</i> Description of the human anatomical structures in English.	2
3.	<i>Topic 1. Practical class 3. Anatomy.</i> Translation, critical analysis of cases. Study of medical terms on normal anatomy: their translation, peculiarities of word formation and their use. Formation of plural nouns and adjectives of Greek-Latin origin.	2
4.	<i>Topic 1. Practical class 4. Anatomy.</i> Translation, critical analysis of cases. Study of medical terms on normal anatomy: their translation, peculiarities of word formation and their use. Formation of plural nouns and adjectives of Greek-Latin origin.	2
5.	<i>Topic 2. Practical class 5. Biology. Genetic variation</i> Description of the genetic variation by genotype and phenotype, types of mutations.	2

6.	<p><i>Topic 2. Practical class 6. Biology.</i></p> <p>Study of medical terms on biology: their translation, peculiarities of word formation.</p> <p>Improvement of skills in formation of plural nouns and adjectives of Greek-Latin origin.</p> <p>Translation, critical analysis of genetic clinical cases, and Biology-focused specialized publications in English.</p>	2
7.	<p><i>Topic 3. Practical class 7. Histology. Organelles and tissues.</i></p> <p>Study of medical terms on histology: their translation, peculiarities of word formation and usage.</p> <p>Description of types of tissues, layers and organelles according to their composition and functions in English.</p>	2
8.	<p><i>Topic 3. Practical class 8. Histology.</i></p> <p>Translation, critical analysis of cases, and Histology-focused specialized publications.</p> <p>Description of the human histological structures in English.</p>	2
9.	<p><i>Topic 4. Practical class 9. Physiology.</i></p> <p>Study of medical terms on normal physiology: their translation, peculiarities of word formation.</p> <p>Analysis of relevant elements of Greek-Latin origin and their use.</p>	2
10.	<p><i>Topic 4. Practical class 10. Physiology.</i></p> <p>Translation, critical analysis of cases.</p> <p>Peculiarities of the use of temporal constructions and adverbs in the medical context.</p>	2
11.	<p><i>Topic 4. Practical class 11. Physiology.</i></p> <p>Description of vital processes in the human body at the systemic and organismal levels in English.</p>	2
12.	<p><i>Topic 5. Practical class 12. Pathophysiology. Embolism.</i></p> <p>Learning active vocabulary on the topic. Definition of embolism, comparative analysis of its types by pathogenesis, description of its diagnosis, treatment, and measures to prevent its complications.</p> <p>Development of skills in collecting complaints, history of life and illness, state of organs and body systems in English.</p>	2
13.	<p><i>Topic 5. Practical class 13. Pathophysiology.</i></p> <p>Study of medical terms on pathological physiology: their translation, peculiarities of word formation and application in professional sources of information and communication.</p> <p>Writing abstracts and summaries of scientific medical publications.</p>	2
14.	<p><i>Topic 5. Practical class 14. Pathophysiology.</i></p> <p>Presentation of psychomotor and physical development assessment of a patient and its disorders.</p> <p>Interpretation of laboratory and instrumental studies results, with further justification of the preliminary diagnosis in English.</p> <p>Description of typical pathological processes, metabolic disorders, etc.</p>	2
15.	<p><i>Topic 5. Practical class 15. Pathophysiology. Cirrhosis.</i></p> <p>Learning active vocabulary on the topic. Definition of cirrhosis, critical analysis of its etiology, pathogenesis, description of its diagnosis, treatment, and measures to prevent its complications.</p> <p>Discussion of the ethical principles of treatment and care of a patient with liver cirrhosis due to alcohol abuse.</p> <p>Comparative analysis of hormonal changes observed in men and women with liver cirrhosis.</p>	2

16.	<p><i>Topic 5. Practical class 16. Pathophysiology. Allergy.</i>  Learning active vocabulary on the topic. Definition of allergy, comparative analysis of its types by pathogenesis, description of its diagnosis, treatment, and measures to prevent its complications.  Activation of Grammar use: Tense forms of verbs, modal verbs, passive voice, etc.  Identification of allergic triggers on the examples of situational tasks.</p>	2
17.	<p><i>Topic 6. Practical class 17. Biochemistry. Structure and functions of proteins. Enzymes.</i>  Compiling a summary to the text.  Development of analytical and searching reading and translation skills.</p>	2
18.	<p><i>Topic 6. Practical class 18. Biochemistry.</i>  Study of medical terms on biological chemistry: their translation, peculiarities of word formation.  Analysis of relevant elements of Greek-Latin origin and their use.  Translation, critical analysis of cases.</p>	2
19.	<p><i>Topic 6. Practical class 19. Biochemistry.</i>  Description of vital biochemical processes in the human body and their disorders in English.  Presentation of clinical cases of endocrine and nervous diseases.</p>	2
20.	<p><i>Topic 7. Practical class 20. Microbiology. Pathogens.</i>  Study of medical terms on microbiology: their translation, peculiarities of word formation and use in professional sources of information and communication.  Analytical and search reading. Comparative study of causative agents of infectious diseases.</p>	2
21.	<p><i>Topic 7. Practical class 21. Microbiology. Cholera.</i>  Learning active vocabulary on the topic.  Definition of cholera, critical analysis of its etiology, pathogenesis, description of its diagnosis, treatment, and measures to prevent its complications.</p>	2
22.	<p><i>Topic 7. Practical class 22. Microbiology.</i>  Presentation of microbiological research results in English.  Description of clinical cases on infectious diseases.</p>	2
23.	<p><i>Topic 7. Practical class 23. Microbiology.</i>  Study of medical terms on microbiology: their translation, peculiarities of word formation and use in professional sources of information and communication.  Translation, critical analysis of cases.</p>	2
24.	<p><i>Topic 8. Practical class 24. Pharmacology. Neurotransmitters.</i>  Learning active vocabulary on the topic.  Analytical and searching reading. Comparative analysis of pharmacokinetics of various drugs based on neurotransmitters.</p>	2
25.	<p><i>Topic 8. Practical class 25. Pharmacology.</i>  Translation, critical analysis of situational tasks, and clinical cases.  Description of pharmacological therapy in English.</p>	2
26.	<p><i>Topic 8. Practical class 26. Pharmacology.</i>  Translation, critical analysis of situational tasks, and clinical cases.  Description of pharmacological therapy in English.</p>	2
27.	<p><i>Topic 8. Practical class 27. Pharmacology. GI drugs.</i>  Determination of drug interactions, prescribing treatment, and signs of side effects of certain drugs.</p>	2



	Explanation to a patient the features of a treatment course. Compiling prescriptions and instructions.	
28.	<i>Topic 8. Practical class 28. Pharmacology. Antibiotics.</i> Determination of drug interactions, prescribing treatment, and signs of side effects of certain drugs. Explanation to a patient the features of a treatment course. Compiling prescriptions and instructions.	2
29.	<i>Practical class 29. Course Review.</i>	2
30.	<i>Graded Test.</i>	2
	<b>Total</b>	<b>60</b>

#### 5.4. Topics of laboratory classes

Laboratory classes are not provided.

### 6. Higher education seeker s' self-study activities

No	Topics / tasks	Hours
1.	Topic 1. Preparation for the practical class 1	1
2.	Topic 1. Preparation for the practical class 2	1
3.	Topic 1. Preparation for the practical class 3	1
4.	Topic 1. Preparation for the practical class 4	1
5.	Topic 2. Preparation for the practical class 5	1
6.	Topic 2. Preparation for the practical class 6	1
7.	Topic 3. Preparation for the practical class 7	0,5
8.	Topic 3. Preparation for the practical class 8	0,5
9.	Topic 4. Preparation for the practical class 9	1
10.	Topic 4. Preparation for the practical class 10	1
11.	Topic 4. Preparation for the practical class 11	1
12.	Topic 5. Preparation for the practical class 12	1
13.	Topic 5. Preparation for the practical class 13	1
14.	Topic 5. Preparation for the practical class 14	1
15.	Topic 5. Preparation for the practical class 15	1
16.	Topic 5. Preparation for the practical class 16	1
17.	Topic 6. Preparation for the practical class 17	1
18.	Topic 6. Preparation for the practical class 18	1
19.	Topic 7. Preparation for the practical class 19	1
20.	Topic 7. Preparation for the practical class 20	1
21.	Topic 7. Preparation for the practical class 21	1
22.	Topic 7. Preparation for the practical class 22	1
23.	Topic 8. Preparation for the practical class 23	1
24.	Topic 8. Preparation for the practical class 24	1
25.	Topic 8. Preparation for the practical class 25	1
26.	Topic 8. Preparation for the practical class 26	1
27.	Topic 8. Preparation for the practical class 27	1
28.	Topic 8. Preparation for the practical class 28	1
29.	Topic 8. Preparation for the practical class 29	1
30.	Preparation for the Graded Test	2
	<b>Total</b>	<b>30</b>

## 7. Teaching techniques

### Practical classes:

By the nature of presentation and perception of information:

- *Verbal*: narration, explanation, conversation, instruction, discussion, dispute, case study.
- *Visual*: illustration (including multimedia presentations), demonstration, observation.
- *Practical*: tests; training and creative exercises; solving clinical cases; practical assignments, project design.

By the way of the received information implementation:

- *reproductive* (role play, simulation of a case, etc.);
- *search* (work with reference literature, electronic search information systems, etc.);
- *perceptive* (video lessons, meetings with English-speaking representatives, etc.);
- *logical* (communicative exercises, "case studies" or analysis of a real clinical situation).

**Self-study:** independent work with recommended basic and additional literature, methodical department recommendations, electronic information resources, and bank of Stage-1 English proficiency tests for the exam.

## 8. Forms of control and evaluation methods (including criteria for the learning outcomes assessment)

**Current control:** oral survey, testing, evaluation of practical tasks, communication skills, solving clinical cases, class activities, and independent work of a higher education seeker.

**Final control:** Graded test.

**Current control** is carried out at each practical class following the particular topic. Standardized control methods are used to evaluate higher education seeker s' educational activities: oral reports on relevant topics, testing, and structured written assignments. Forms of current educational activities' assessment are standardized and include control of lexical, grammatical, and communication skills.

During evaluating each topic in current educational activities, a higher education seeker obtains grades on a 4-point (traditional) scale considering the approved criteria: maximum grade - 5, minimum grade - 3, unsatisfactory grade - 2.

### The current control evaluation criteria

«5»	A higher education seeker is fluent in the learned material, actively participates in the subject discussions, confidently demonstrates practical skills while performing tasks, and expresses his own opinion on the topic and creative thinking. The level of competence is high.
«4»	A higher education seeker has mastered the material, participates in the general topic discussion, demonstrates practical skills while performing tasks with some errors, and expresses his own opinion on the topic. The level of competence is sufficient.
«3»	A higher education seeker doesn't have sufficient knowledge of the material studied and is not confident in the topic's discussion. The level of competence is average, reproductive. He/She knows how to overcome the mistakes made.
«2»	A higher education seeker has not mastered the material studied and does not take part in class discussions. The level of competence is low.

The final control is a Graded test. The final control is allowed to be taken only by those higher education seekers who have no academic debts and have an average grade score for the course's academic performance of at least 3.00.

The graded credit is conducted at the last practical class by inquiring a higher education seeker. It is based on the results of the oral answer on a card and graded by a 4-point score. The average current performance score and a grade for the graded test are calculated as the arithmetic average for the discipline and converted into points.

#### **Assessment of learning outcomes at the final control – Graded test**

<b>Content of assessed activity</b>	<b>Rating</b>
Name a term by its description	2
Define the term	3

#### **Criteria for the learning outcomes evaluating a higher education seeker at the Graded test**

<b>Rating</b>	<b>Evaluation criteria</b>
Excellent	A higher education seeker correctly, accurately, and fully has completed all the tasks of the examination card, clearly and logically answered the questions posed by the examiners; thoroughly and comprehensively knows the content of theoretical issues, fluent in professional and scientific terminology; thinks and constructs an answer logically, and freely uses acquired theoretical knowledge when analysing practical tasks; has demonstrated the ability to independently update and replenish knowledge; level of competence - high (creative).
Good	A higher education seeker fully completes all the tasks of the examination card, clearly and logically answers the questions posed by the examiners; sufficiently thoroughly and comprehensively knows the content of the discipline, and possesses professional and scientific terminology; thinks and constructs an answer logically, uses acquired theoretical knowledge when analysing practical tasks. But some of his answers are not full and substantiated, with some minor mistakes, which he corrects himself when the examiner points them out; the level of competence is sufficient (constructive and variable).
Satisfactory	A higher education seeker has not fully completed all the tasks of the examination card, and the answers to additional and leading questions are unclear and vague; possesses a basic scope of theoretical knowledge, and uses professional and scientific terminology inaccurately; experiences significant difficulties in constructing an independent logical answer, in applying theoretical knowledge in the analysis of practical tasks, but has the necessary knowledge to overcome the mistakes under the guidance of an examiner; level of competence - average (reproductive).
Unsatisfactory	A higher education seeker did not complete the task of the examination card and, in most cases did not answer the additional and leading questions of the examiners. He did not master the basic scope of theoretical knowledge, and showed a low level of mastering professional and scientific terminology; answers to questions are fragmentary, inconsistent, and illogical, and cannot apply theoretical knowledge when analysing practical tasks; did not manage to master the skills of independent work; the level of competence is low (receptive-productive).

#### **9. Distribution of points received by higher education seekers**

The obtained average score for the academic discipline for higher education seekers who have successfully mastered the work program is converted from a traditional four-point scale to points on a 200-point scale, as shown in the table:

**Table of conversion**

<i>National grade</i>	<i>The course score</i>
<b>Excellent «5»</b>	<b>185 – 200</b>
<b>Good «4»</b>	<b>151 – 184</b>
<b>Satisfactory «3»</b>	<b>120 – 154</b>

A multi-point scale (200-point scale) characterizes the actual performance of each higher education seeker in mastering the educational component. The conversion of the traditional grade (average score for the academic discipline) into the 200-point grade is carried out by the information and technical department of the University.

According to the obtained points on the 200-point scale, the academic performance of higher education seekers is evaluated according to the ECTS rating scale. Further ranking according to the ECTS rating scale allows one to evaluate the achievements of higher education seekers in the educational component who are studying in the same course and the same specialty, according to the points they received.

The ECTS scale is a relative-comparative rating, which establishes the higher education seeker's belonging to the group of better or worse ones among the reference group of his/her fellows (faculty, specialty). An "A" grade on the ECTS scale cannot be equal to an "excellent" grade, a "B" grade to a "good" grade, etc. When converting from a multi-point scale, the limits of grades "A", "B", "C", "D", "E" according to the ECTS scale do not coincide with the limits of grades "5", "4", "3" according to the traditional scale. Higher education seekers who have received grades of "FX" and "F" ("2") are not included in the list of ranked ones. The grade "FX" is given to higher education seekers who have obtained the minimum number of points for their current academic performance, but who have not passed the final examination. A grade of "F" is given to higher education seekers who have attended all classes in the discipline, but have not achieved a grade point average (3.00) for their current academic performance and are not allowed to take the final examination.

Higher education seekers studying in the same year (same specialty), based on the number of points scored in the discipline, are ranked on the ECTS scale as follows:

**Conversion to the ECTS scale**

ECTS grade	Statistics
A	The best 10% of higher education seekers
B	The next 25% of higher education seekers
C	The next 30% of higher education seekers
D	The next 25% of higher education seekers
E	The last 10% of higher education seekers

## 10. Methodological back-up

- The course's work program;
- The syllabus;
- Methodical manuals to practical classes;
- Guidelines to self-studies;
- Multimedia presentations;
- Case study assignments;
- On-line testing;
- Examination cards;
- Study guides:

1. English for professional purposes: Study guide to practical classes for the 3<sup>rd</sup> year higher education students in medicine [Electronic edition] / O. V. Kyriazova, V. Ye. Abramovych, A. I. Levytska, A. A. Tsyba. – Odesa: ONMedU, 2023. – 260 p.
2. Manual “English grammar exercises for medical students” (for self-study). ONMedU, Department of Foreign Languages. Odesa, 2020.

## 11. Final control tasks

### *I. Name a term by its description.*

1. Mobile slightly curved gram-negative bacilli that within 6 hours grow into a light blue film on the 1% alkaline peptone water (Vibrio).
2. A group of metabolic disorders characterized by a high blood sugar level (Diabetes mellitus).
3. The part of intestines localised in the upper umbilical region (Transverse colon).
4. The presence of one or more calculi in the gallbladder (Cholelithiasis).
5. Proliferation of connective tissue in the liver parenchyma (fibrosis).
6. Infrequency or difficulty in defecation and the passage of hard, dry feces (constipation).
7. An organ that consists of lymphoid tissue that forms lymph nodules; the nodules are located diffusely and have a central artery (spleen).
8. The gland which regulates mood, sexual development, and daily cycles in response to environmental light (pineal).
9. Lymphocytes that have membrane receptors to IgM, activate in response to certain antigens, reproduce mitotically, differentiate into plasma cells that produce antibodies (B lymphocytes).
10. The main source of the blood supply to the descending colon (Inferior mesenteric artery).
11. An artery that supplies the spleen with blood (Truncus coeliacus).
12. A hormone drug for intensification of labor activity (Oxytocin).
13. The terminal fibers of the cardiac conducting system; they carry impulses through the walls of the ventricles (Purkinje fibers).
14. The type of immunity obtained by administration of an immune serum from other people or animals (Artificial adaptive passive).
15. A repeating cycle of gradually increased and then decreased respiration followed by a period of apnea; seen in cases of coma and in terminally ill patients (Cheyne–Stokes respiration).
16. Rapid and deep gasping respiration without pause; characteristic of severe acidosis (Kussmaul respiration).
17. An antihistaminic drug that does not suppress central nervous system. (Loratadine)
18. Name the anatomical structures of the right lung radix (downward order): (Bronchus, artery, veins)
19. The patients with organic brain disorder can take this drug to improve their memory. (Piracetam)
20. Serological reaction based on complementation of antigen with antibody chemically bound to peroxidase or alkaline phosphatase. (Enzyme-linked immunosorbent assay)

### *II. Define the term.*

21. Nitroglycerine (a calcium channel blocker prescribed to patients with ischemic heart disease, administered sublingually)
22. Insulin (a peptide hormone produced by beta cells of the pancreatic islets; regulates the metabolism of carbohydrates, fats and protein by promoting the absorption of glucose from the blood into liver, fat and skeletal muscle cells)

23. Hereditary spherocytosis (microspherocytic hemolytic anemia, Minkowski-Chauffard syndrome; a condition characterized by hemolytic anemia (when red blood cells are destroyed earlier than normal). Hemoglobinopathy leads to erythrocyte hemolysis)
24. Henle's loop (the portion of a nephron that leads from the proximal convoluted tubule to the distal convoluted tubule)
25. Digoxin (a medication used to treat atrial fibrillation, atrial flutter, and heart failure; Decreases permeability of the cell membrane to calcium)
26. N. petrosus minor (carries preganglionic parasympathetic fibers to the parotid gland and ensures its secretion function. It is considered a branch of the glossopharyngeal nerve)
27. Wiskott-Aldrich syndrome (characterized by abnormal immune system function (immune deficiency), eczema (an inflammatory skin disorder characterized by abnormal patches of red, irritated skin), and a reduced ability to form blood clots. This condition primarily affects males.)
28. Xanthomatosis (a deposition of yellowish cholesterol-rich material that can appear anywhere in the body; characterised by increased Low-density lipoproteins concentration)
29. Cholera (a bacterial infection; its causative agent is gram- negative curved mobile monotrichous bacilli that do not produce spores or capsules. The classic symptom is large amounts of watery diarrhea that lasts a few days. Vomiting and muscle cramps may also occur.)
30. Parkinson's disease (a brain disorder that causes unintended or uncontrollable movements, such as shaking, stiffness, and difficulty with balance and coordination, caused by disturbance of dopamine synthesis in Substantia nigra)
31. Eosinopenia (a reduction of circulating eosinophils  $<0.01 \times 10^9/l.$ ; produced by at least two mechanisms: (1) primary elevation of adrenal corticosteroids or epinephrine; and (2) acute inflammation or stress, acting in part through secondary release of adrenal corticoids and/or epinephrine and leads to changes in the level of Glucocorticoids)
32. Vaquez's disease (Polycythemia - an acquired myeloproliferative disorder characterized by an elevated absolute red blood cell mass caused by uncontrolled red blood cell production, frequently associated with uncontrolled white blood cell and platelet production; the leading part of its pathogenesis is Neoplastic erythroid hyperplasia)
33. Spirography (the graphic measurement of breathing, including breathing movements and breathing capacity)
34. Metabolic acidosis (The buildup of acid in the body due to kidney disease or kidney failure; leads to hyperglycemia and ketonemia with diabetes mellitus type I)
35. Hyperlipoproteinemia type IIa (characterized by elevated LDL but normal triglycerides and is due to a deficiency of the LDL receptor, a defect of the receptor or a modified LDL-apolipoprotein B-100, caused by mutation in the LDL receptor (LDLR) gene on chromosome 19p.)
36. Convection (is single or multiphase fluid flow that occurs spontaneously due to the combined effects of material property heterogeneity and body forces on a fluid, most commonly density and gravity, as in hot weather ventilators usage which leads to intensified heat transfer from the human body)
37. Thyroid gland (an organ consisting of saccule-shaped rounded structures of varying size. Inside these structures there is a gel-like non-cellular substance - colloid; structure walls are composed of one layer of cuboidal cells that lay on the basement membrane. Between the saccules there is connective tissue with vessels)
38. Inferior part of the precentral gyrus (contains motor centers regulating activity of head muscles)
39. Mucopolysaccharidoses (a group of metabolic disorders caused by the absence or malfunctioning of lysosomal enzymes needed to break down molecules called

- glycosaminoglycans; manifest in metabolic disorders of connective tissue, bone and joint pathologies. The sign of this disease is the excessive urinary excretion of Glycosaminoglycans)
40. Sympathetic unconditioned reflex (for example Pupil dilation which occurs when a person steps from a light room into a dark one.)
  41. Atopy (local anaphylaxis; tendency to produce an exaggerated immune response to otherwise harmless substances in the environment; the most common manifestations are allergic asthma, rhinitis and dermatitis)
  42. Interphase (the stage of mitosis when the DNA doubles)
  43. Cachexia (a “wasting” disorder that causes extreme weight loss and muscle wasting, and can include loss of body fat)
  44. Paronychia (an inflammation of the skin around the nail)
  45. *Echinococcus granulosus* (a dog tapeworm; wild or domesticated ungulates, such as sheep, serve as an intermediate host; produces spheric helminth larvae mostly in lungs or liver causing clinical symptoms in humans such as pain in the chest and bloody expectorations)
  46. Hydronephrosis (a condition where one or both kidneys become stretched and swollen as the result of a build-up of urine inside them: Renal pelvic lumen is distended with accumulating urine. Renal parenchyma is acutely thinned out.)
  47. Von Gierke’s disease (Glycogen storage disease type I - a condition in which the body cannot break down glycogen with absence of glucose 6-phosphatase, hypoglycemia, and hepatomegaly)
  48. Polyploidy (a condition in which the cells of an organism have more than one pair of (homologous) chromosomes)
  49. Emphysema (the lungs are enlarged, pale, soft, do not deflate, crunch when cut. Microscopically there are dilated alveolar ducts, alveolar septa are thin, and signs of intracapillary sclerosis are observed.)
  50. Adrenocortical hyperfunction (an overexpression of products of the adrenal cortex. When cortisol is overproduced, it is called Cushing's syndrome. When aldosterone is overproduced, it is called hyperaldosteronism. Clinical manifestations include hirsutism, moon-shaped face, stretch marks on the abdomen, hypertension and hyperglycemia)

## 12. Recommended reading

### Basic:

1. English for professional purposes: Study guide to practical classes for the 3<sup>rd</sup> year students of higher education in medicine [Electronic edition] / O. V. Kyriazova, V. Ye. Abramovych, A. I. Levytska, A. A. Tsyba. – Odesa: ONMedU, 2023. – 260 p.
2. Yeromkina H.H., Mokrienko E.M., Rusalkina L.H., Nesterenko N.V. and others. English language guide for students of the 3rd year of medical faculty. Elective course "Features of medical literature" - Odesa: ONMedU, 2020. - 150 p. (electronic version).
3. Manual “English grammar exercises for medical students” (for self-study). ONMedU, Department of Foreign Languages. Odesa, 2020.

### Additional:

1. Medical English for Academic Purposes. Yu. V. Lysanec, O. M. Beliaieva, M. P. Melashenko. Medycyna, 2018. 312 p.
2. Sabluk A. H., Levandovska L. V. English for medical student . Kyiv: Medycyna, 2018. 576 p.
3. McCarter S. MEDICINE (OXFORD ENGLISH FOR CAREERS) 2. Student 's Book. Oxford University Press, 2010. 144 c.
4. Whalen K. Lippincott Illustrated Reviews: Pharmacology. Lippincott Williams & Wilkins, 2018. 576 c.
5. Swan M. Practical English Usage. Oxford University Press, 2017. 768 c.

## 13. Online sources

1. Collection of test tasks for preparation for the licensing exam STEP 1: General medical training. ONMedU, Department of Foreign Languages, 2021.  
[https://info.odmu.edu.ua/chair/foreign\\_lang/fileinfo/73/142214](https://info.odmu.edu.ua/chair/foreign_lang/fileinfo/73/142214)
2. Webster's Dictionary and Thesaurus  
<https://www.merriam-webster.com/>
3. Longman Dictionary of Contemporary English  
<https://www.ldoceonline.com/>
4. The International Medical Interpreters Association  
<https://www.imiaweb.org/>
5. Free Online Term Extractors  
<http://recremisi.blogspot.com/p/online-term-extractors.html>
6. Medical Dictionary Online  
<https://www.online-medical-dictionary.org/>