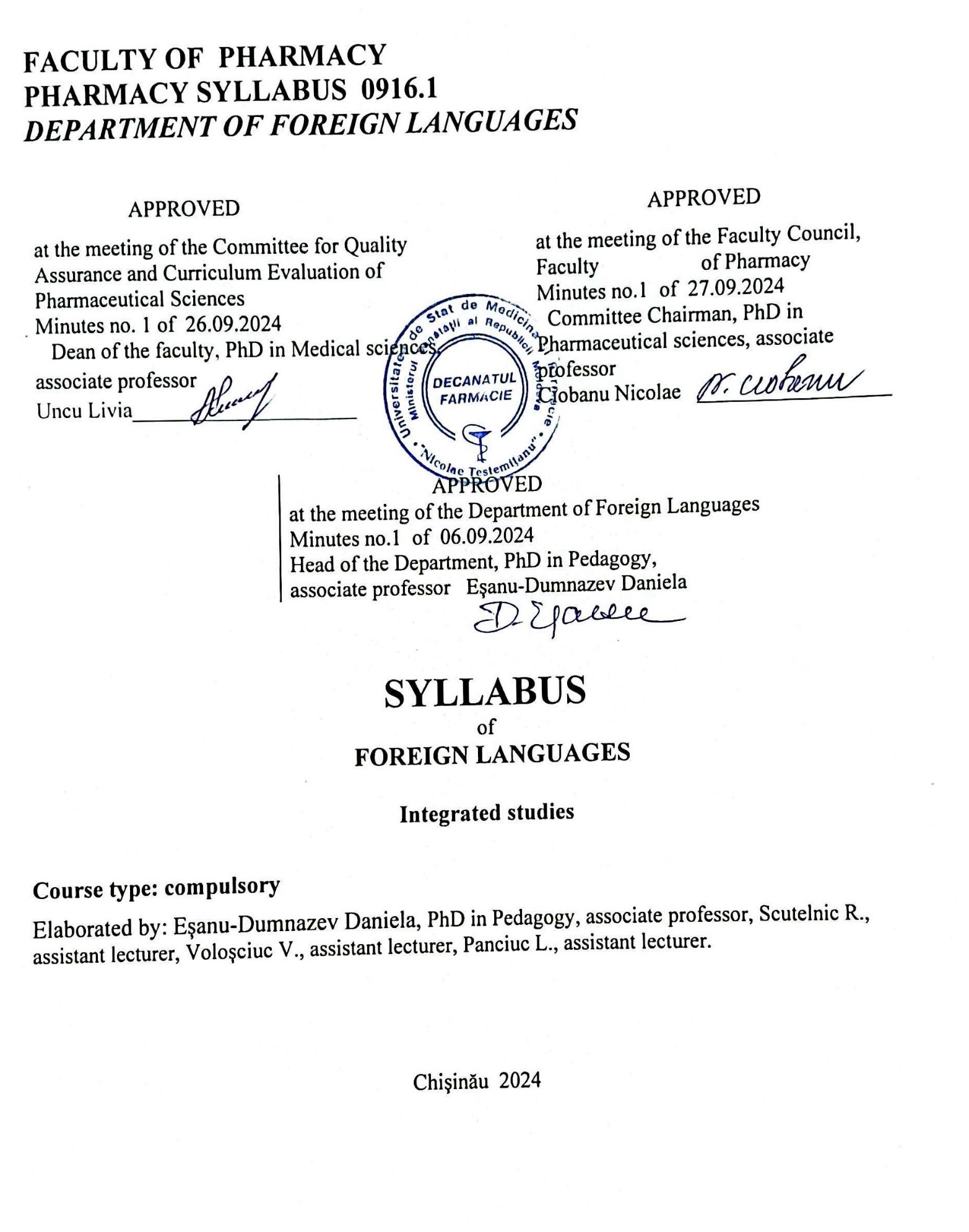
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**PRELIMINARY**

* **Overview of the discipline: the role of discipline in developing specific skills within the vocational / specialty training program**

The discipline of *Modern languages* plays a significant role in the curriculum of *Nicolae Testemitanu* State University of Medicine and Pharmacy, whereas the modern languages (*English and French*) are considered as *lingua franca* and working languages among the EU institutions. Adjustment to the Bologna process and European standards of language proficiency requires provision of quality and skills as a priority objective in the process of educational integration across Europe.

According to these standards, *Modern Languages* is a practical course, designed for medical/pharmaceutical students in order to enable them to actively apply and use *medical/pharmaceutical terminology* within the practical training and workplace context. The *Modern Languages* course (*medical/ pharmaceutical terminology*) is oriented towards the development of language skills, established by the Common European Framework of Reference for Languages (CECRL) and developed by the Council of Europe. The *Modern Languages course (medical terminology*) aims at acquiring essential medical/pharmaceutical terminology, developing solid linguistic skills in pharmacy students that are necessary for academic mobility, intercultural and professional integration.

The formative orientation of higher education and training of medical students represent a reference framework for the professional training of *pharmaceutical* professionals in order to use foreign languages in professionalcommunication, facilitating international communication and cooperation in the field of pharmacy, becoming competitive on the labor market.

* **Curriculum purpose in professional training**

Studying *medical/pharmaceutical terminology* in a foreign language aims at developing professional abilities, knowledge and attitudes enabling the pharmacy students to explore a wide range of medical/ pharmaceutical subjects.

* Languages of instruction: ***English, French.***
* Beneficiaries: 1st year students, faculty of Pharmacy.

1. **SUBJECT MANAGEMENT**

|  |  |  |  |
| --- | --- | --- | --- |
| Subject code | | **G.01.O.001/G.02.O.013** | |
| Subject name | | ***Modern languages*. *English/ French*** | |
| Subject leader | | **D.Eșanu-Dumnazev, R. Scutelnic, V.Voloșciuc, N.Doronin, O.Tumuruc, L.Panciuc** | |
| Year | **1** | Semesters | **I/II** |
| Total number of hours, including: | | | **120** |
| Course |  | Laboratory /practical work |  |
| Seminars | **60/ 60** | Individual work | **60+60** |
| Assessment form | **E\*/E** | Number of credits | **4+4** |

1. **LEARNING OBJECTIVES**

***At the end of the course, the students will be able to:***

* ***at the level of knowledge and understanding:***
* to define the particularities of the medical-pharmaceutical terminology in a foreign language;
* to identify the specialty-specific symbols and the particularities of the pharmaceutical terminology;
* to apply authentic specialized vocabulary within the professional communication;
* to express specific professional medical-pharmaceutical messages;
* to define grammatical structures characteristic of a foreign language within a professional context;
* to use pharmaceutical terminology for later use of linguistic and communication skills (orally and in written form);
* to set the basic principles and notions in the specialized field, necessary in the subsequent collaboration and participation in international conferences / projects;
* to define grammatical structures characteristic of the terminology in a foreign language.

# *at the level of application:*

* to interpret some ideas, projects, and processes of the pharmaceutical discipline;
* to apply reading skills (articles), comprehension skills, and skills of summarizing information;
* to render a foreign language text;
* to translate texts, articles, documents, prescriptions into a foreign language;
* to apply the written and oral language skills within the doctor / patient communication, doctor / doctor communication;
* to develop skills of selection, synthesis and summarizing;
* to apply knowledge acquired in learning situations: dialogues, projects, local and international conferences, speeches, etc.;
* to develop communication skills in order to initiate discussions, dialogues, thematic debates within professional settings.
* ***at the level of integration:***
* to assess the role of the foreign language within the professional context and in the professional training of the future pharmacists;
* to use knowledge and skills of communication in a professional environment, using health care-specific topics in order to develop an intercultural or interdisciplinary dialogue;
* to implement knowledge acquired in the research / writing activity of specialized works using a foreign language;
* to implement the skills of analyzing and synthetizing the information from authentic sources and to perform an oral or written presentation;

**IV. PRELIMINARY REQUIREMENTS**

* minimum level A2-B1 of knowledge of foreign languages according to CEFR for languages;
* digital skills to complete tasks, projects, assessments;
* communication and teamwork skills;
* autonomy in carrying out individual work;
* qualities such as tolerance, compassion, etc.

1. **Topics and approximate distribution OF hourS**

***Seminars and individual work* G.01.O.002 (French, 1st Semester)**

| No. | ТOPIC | Number of hours | | |
| --- | --- | --- | --- | --- |
| Lectures | Practical work | Individual work |
| 1. | ***Nicolae Testimiţanu* University of Medicine and Pharmacy**  **Testimiţanu – outstanding personality in the medicine of the Republic of Moldova.** |  | 6 | 6 |
| 2. | **Faculty of pharmacy - history and achievements.** |  |  | 4 |
| 3. | **Pharmacist`s profession and mission. Pharmacist – the drug expert. Famous pharmacists in the Republic of Moldova and France.** |  | 6 | 6 |
| 4. | Pharmacy specialities**. Pharmacist`s role and goals.** |  |  | 4 |
| 5. | **Pharmacist`s profile, skills and competences.** |  | 4 | 4 |
| 6. | **Types of drug dosage forms. Mode of administration of drugs.** |  | 6 | 6 |
| 7. | **Adverse effects of drugs. Improper use of drugs.** |  | 2 | 2 |
| 8. | **Medicine cabinet. Wonder pill.** |  | 2 | 2 |
| 9. | **Prescription and medication insert. Drug code. Codex Medicamentarius Gallicus.** |  | 2 | 2 |
| 10. | **Antibiotics. Drug "release" in the body.** |  | 4 | 4 |
| 11. | **Self-medication. The 7 self-medication warnings.** |  | 4 | 4 |
| 12. | **Water-soluble** vitamins**. Avitaminosis. Vitamin deficiency.** |  | 6 | 6 |
| 13. | F**at-soluble vitamins. Hypervitaminosis in the body.** |  | 6 | 6 |
| 14. | Revision |  | 2 | 2 |
| 15. | Final test |  | 2 | 2 |
|  | **Total** |  | **60** | **60** |
|  | **Total** | **120** | | |

***Seminars and individual work* G.02.O .013 (French, 2nd Semester)**

| No. | ТOPIC | Number of hours | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Lectures | | Practical work | Individual work | |
| 1. | Pharmaceutical studies in the Republic of Moldova. |  | 6 | | | 6 |
| 2. | Pharmaceutical studies in France. |  | | 4 | 4 | |
| 3. | Pharmacist - a health security mission.French Pharmacist`s Oath. |  | | 4 | 4 | |
| 4. | Official emblems of the French pharmacy. History of pharmaceutical laboratories. Thomas Beecham - the founder of pharmaceutical laboratories. |  | | 4 | 4 | |
| 5. | Pharmacology - a multidisciplinary science. |  | | 4 | 4 | |
| 6. | The oath of the French pharmacist. Medical ethics. Cl.Gallen - the founder of the French pharmacist`s oath. |  | | 4 | 4 | |
| 7. | Trace elements and minerals. Nutritional needs in trace elements and minerals. |  | | 6 | 6 | |
| 8. | Placebo-definition and meaning. Its role in medicine. |  | | 4 | 4 | |
| 9. | Devil`s plants. |  | | 4 | 4 | |
| 10. | Silybum marianum (Chardon Marie) - the plant with healing effects of hepatitis. Harmful and toxic plants.Description of a medicinal plant according to dynamic and pharmaceutical criteria. |  | | 6 | 6 | |
| 11. | Therapeutic properties of Spring pheasant's eye (Adonis vernalis). The legend and origin of Adonis vernalis. |  | | 4 | 4 | |
| 12. | Use of Narcissus in medicine. The legend and origin of Narcissus. |  | | 4 | 4 | |
| 13. | Reports and discussions. |  | | 2 | 2 | |
| 14. | Revision. |  | | 2 | 2 | |
| 15. | Final test. |  | | 2 | 2 | |
|  | **Total** |  | | **60** | **60** | |
|  | **Total** | **120** | | | | |

1. **Topics and approximate distribution OF hourS**

***Seminars and individual work* G.01.O.002 (English, 1st Semester)**

| No. | ТOPIC | Number of hours | | |
| --- | --- | --- | --- | --- |
| Lectures | Practical work | Individual work |
|  | Introduction to pharmacy. History of pharmacy. Pharmacist`s profile. |  | 4 | 4 |
|  | Cell. Organization of the human body. |  | 4 | 4 |
|  | Musculoskeletal system. |  | 4 | 4 |
|  | Nervous system. Sensory organs of the human body. |  | 4 | 4 |
|  | Cardiovascular system. The structure and function of the heart. |  | 4 | 4 |
|  | Respiratory system. |  | 4 | 4 |
|  | Digestive system. The structure and function of the tongue. |  | 4 | 4 |
| 8. | Endocrine system and hormones. |  | 2 | 4 |
| 9. | Immune system. Immunity. Immunization. Vaccines. Vaccination. Microorganisms. Alexander Fleming - the discovery of penicillin. |  | 4 | 4 |
| 10. | Lipids. |  | 4 | 4 |
| 11. | Carbohydrates. |  | 4 | 4 |
| 12. | Proteins. Steroids. |  | 4 | 4 |
| 13. | Vitamins. Avitaminosis. |  | 4 | 4 |
| 14. | Plants. Plant structure. Types of plants. |  | 8 | 8 |
| 15. | Final test |  | 2 | - |
|  | **Total** |  | **60** | 60 |

***Seminars and individual work* G.02.O.013 (English, 2nd Semester)**

| No. | ТOPIC | Number of hours | | |
| --- | --- | --- | --- | --- |
| Lectures | Practical work | Individual work |
| 1. | Drug dosage forms. Types of drug dosage forms.  Advantages and disadvantages of solid dosage forms. |  | 4 | 4 |
| 2. | Administration of drugs. Routes of administration of drugs. Bioavailability. |  | 4 | 4 |
| 3. | Sources of drugs. |  | 2 | 2 |
| 4. | Dosage forms. Classification of dosage forms. Solid dosage forms.  Tablets. Classification, types of tablets. Advantages and disadvantages. |  | 4 | 4 |
| 5. | Liquid dosage forms. Advantages and disadvantages of liquid dosage forms. |  | 4 | 4 |
| 6. | Semi-solid dosage forms. Advantages and disadvantages of semi-solid dosage forms. |  | 2 | 4 |
| 7. | Gaseous dosage forms. |  | 2 | 2 |
| 8. | Quality of medicines. Medication package insert. |  | 2 | 2 |
| 9. | Requirements for storing medicines. |  | 2 | 2 |
| 10. | Introduction to pharmacology. Pharmacology - historical development. Pharmaceutical fields. |  | 2 | 2 |
| 11. | Nomenclature and standards of medicines. Classification of drugs. |  | 4 | 4 |
| 12. | Neurological drugs. |  | 4 | 4 |
| 13. | Cardiovascular drugs. Types of cardiovascular drugs. |  | 4 | 4 |
| 14. | Gastrointestinal drugs. |  | 4 | 4 |
| 15. | Antihistamines. |  | 4 | 4 |
| 16. | Antibiotics |  | 4 | 4 |
| 17. | Antivirals. |  | 4 | 4 |
| 18. | Drug toxicity. Drug tolerance. |  | 2 | 2 |
| 19. | Final test |  | 2 | - |
| **Total** | |  | **60** | **60** |

1. **INSTRUCTIONAL OBJECTIVES AND UNIT CONTENTS (*FRENCH*)**

| **Objectives** | | **Unit contents** | |
| --- | --- | --- | --- |
| **Module 1. Medical education and training** | | |
| ▪ to understand medical texts;  ▪ to recognize medical/pharmaceutical terms in texts;  ▪ to apply the new terms in professional situations;  ▪ to draw conclusions;  ▪ to comment on texts;  ▪ to express opinions on the subject;  ▪ to speak about authentic video documents;  ▪ to consolidate the grammatical structures;  ▪ to apply grammatical structures in medical / pharmaceutical contexts;  ▪ to define medical/pharmaceutical terms;  ▪ to put questions on the studied material;  ▪ to answer questions about the studied material. | 1. *Nicolae Testemitanu* State University of Medicine and Pharmacy.  2.Nicolae Testemitanu - the outstanding Moldovan doctor.  *Grammar:* Imperative Mood. Zero article. | |
| **Module 2. Pharmacy specialties and pharmacist`s profile** | | | |
| • to apply the knowledge gained in practice;  • to communicate fluently in conversations / dialogues (pharmacist / patient);  • to define terms – *pharmacist*, *drugstore*, etc.  • to express arguments, comments;  • to describe the typical activity of each specialty;  • to expand knowledge in solving minor problems in medical and pharmaceutical field,  • to summarize video messages;  • to use actively the studied terminology;  • to describe the activity of the biologist-pharmacist;  • to comment on the meaning of the phrase "to be a pharmacist today"  • to consolidate the revised grammatical structures;  • to apply in practice the grammatical knowledge;  • to define medical-pharmaceutical terms;  • to put questions on the studied material;  • to answer questions on the studied material;  • to speak about authentic specialized materials;  • to express the point of view on a topic;  • to describe the professional evolution of the pharmacist. | | 1. Pharmacist`s profile.  2. Pharmacist`s qualities  3. Pharmacist – a drug expert  4. Pharmacist`s role and mission.  5.Pharmacist - the apothecary`s successor.  *Grammar:* Zero article. Verb forms *ân –ant.* Indefinite adjectives and pronouns.  *Video:* Sandrine - office pharmacist.  The portrait of the pharmacist.  6. Druggist pharmacist.  7. Wholesale pharmacist.  8. Industrial pharmacist.  9. Office pharmacist.  10. Pharmacist inspector in PH.  *Grammar:* Relative pronouns. Indefinite adjectives and pronouns  *Video:* Being a pharmacist today. | |
| • to compare the achievements of the well-known personalities in the field of pharmacy: Cl.Gallen, Cl.Bertrand, Fabre, Fleming, V.Procopișin, N.Testimițanu;  • to analyze the additional information (video projects, PPP) about famous personalities in the field of pharmacy;  • to use additional information regarding the old pharmacy;  • to discuss about the historical landmarks of the Pharmacy Faculty;  • to summarize the professional evolution of the pharmacist;  • to comment on the history of the Pharmacy Faculty;  • to argue videos;  • to apply grammatical structures in medical contexts. | | 1. History of the Pharmacy Faculty.  2. Outstanding personalities in the field of pharmacy in France and Moldova.  3. The professional evolution of the pharmacist.  4. Pharmacy in antiquity.  *Grammar:* Pronominal verbs. Present Active and Passive. Indicative mood.  *Video:* The Galenic pharmacist | |
| **Module 3. Drugs and their role in the treatment of diseases** | | |
| • to identify the forms of pharmaceutical preparations;  ▪ to classify the types of drug testing;  ▪ to understand the mechanism of drug interaction;  ▪ to draw conclusions on the subject;  ▪ to debate on drugs administration;  ▪ to make up dialogues (pharmacist-patient);  ▪ to revise grammar rules;  ▪ to apply grammar rules in practice;  ▪ to draw conclusions;  ▪ to present additional information;  ▪ to decode video messages;  ▪ to summarize audio / video messages;  • to describe medicines;  • to highlight the danger of self-medication;  • to analyze medication inserts. | 1. Drug Association.  *Grammar:* Gender, number of nouns. Possessive adjectives and pronouns. Present /past infinitive. Relative and compound pronouns. Adjectives. Feminine gender. Plural number. Adverbs.  2. Prescription and medication insert.  *Video:* The danger of self-medication. | |
| **Module 4 Vitamins and trace elements** | |  | |
| • to perform different task-based activities using medical/pharmaceutical terminology;  • to categorize vitamins into 2 essential groups;  • to explain the etymology of the word *fat / water soluble vitamins*;  • to highlight the benefits and importance of vitamins on the human body;  • to describe the properties of vitamins in the treatment of diseases;  • to make up dialogues;  • to describe diseases that are manifested by vitamin and trace element deficiencies;  • to differentiate diseases: scurvy, blindness, beriberi, xerophthalmia;  • to identify the importance of vitamins on the body;  • to stress the impact of deficiencies and excess of vitamins on the human body;  • to distinguish the scientific name of each vitamin;  • to describe a vitamin deficiency disease;  • to present additional information about a certain vitamin;  • to integrate grammatical and lexical knowledge;  • to memorize new terms;  • to apply new terms in practice;  • to summarize audio-visual messages. | | 1. The alphabet of vitamins.  2. Fat /water soluble vitamins.  3. Avitaminosis.  4. Deficiencies of trace elements.  *Grammar:* Types of adverbs. Immediate verb tenses. Sequence of tenses.  *Video:* The dance of vitamins. | |
| **Module 5 Pharmaceutical studies** | |  | |
| • to compare the organization of pharmaceutical education in Moldova and French-speaking countries;  • to describe the working day of a pharmacy student;  • to argue the importance of the profession of pharmacist  • to summarize specialized texts;  • to define pharmaceutical terms specific to the field of pharmaceutical education. | | 1. Pharmaceutical studies in France and French-speaking countries.  2. The working day of a pharmacy student. | |
| **Module 6. Medical ethics and the oath of pharmacists in France** | | |
| ▪ to summarize the history of the oath of pharmacists in France;  ▪ to identify the deontological rules;  • to describe pharmaceutical symbols / emblems used in France;  • to speak about the therapeutic virtue of snake venom;  ▪ to comment on the authentic version of the oath in French;  ▪ to memorize the oath;  ▪ to discuss about / to debate on the topic;  ▪ to define the two official emblems of the pharmacy;  ▪ to explain the meaning of the symbols (snake, cross, cup);  ▪ to discuss about mythology;  ▪ to find out about the characters from ancient mythology, Higeia, Panacea, Asclepius and all the deities in the field of pharmacy: Daphna, Psyche, Athlas;  ▪ to explain the origin of the green cross;  ▪ to describe the role of the snake in medicine;  • to explain pharmaceutical products made from snake venom - Viprosal, Najatox;  • to present additional information on the extraction of snake venom and its use in medicine;  • to define the meaning of the green cross. | 1. Medical ethics.  2. The oath of pharmacists in France.  3. The oath of the apothecaries.  4. Cl.Galenus - the founder of the oath of the French pharmacists.  5. The official emblems of the French pharmacy.  6. *Video:* The snake symbol in Medicine.  *Grammar:* The subjunctive present. Adjectives and demonstrative pronouns. Degrees of comparison. | |
| **Module 7. Properties of medicinal plants in the treatment of various diseases** | | |
| • to describe the essence of medicinal plants in natural treatments;  ▪ to illustrate the usefulness of medicinal plants;  ▪ to identify diseases treated with medicinal plants;  ▪ to name the active substance of the medicinal plant;  ▪ to demonstrate the recommended administration doses;  ▪ to identify the forms of administration of medicinal plants;  ▪ to describe the beneficial effects on the organism;  ▪ to explain the interaction and effects that take place between plants and the organism;  ▪ to name the possible side effects;  ▪ to define new terms on the subject;  • to describe the medicinal plant, family, kingdom;  ▪ to integrate grammatical structures;  ▪ to describe a medicinal plant;  • to know the active principle of the plant. | 1. Medicinal properties of Spring pheasant's eye (Adonis vernalis).  2. The legend and origin of Adonis vernalis.  3. Silybum marianum (Chardon Marie) - the plant of patients suffering from hepatitis.  4. Nutritional needs in calcium.  5. Dangerous and toxic plants.  6.Oligo-elements and minerals.  *Grammar*: Past participle. Degrees of comparison. Expression of succession.  Past tenses. Imperfect / Perfect simple,etc**.** | |
| **Module 8 . The world of medicinal plants. Botany and pharmacognosy.** | | | |
| • to recognize the Latin, popular and vernacular names of medicinal plants;  • to differentiate the plants of Greek origin from the Latin ones;  • to understand the essence of medicinal plants in the treatment of diseases;  • to speak about the possible harmful effects of plants;  • to name the active substance of the medicinal plant;  • to identify diseases treated with medicinal plants;  • to present the beneficial effects of plants on the human body;  • to explain the interaction and adverse reactions that occur between plants and the organism;  • to identify the dosage and the way of administration of the plants;  • to define the term medicinal plant, pharmacognosy, botany;  • to demonstrate the harmful effects of plants through concrete cases;  • to describe the plant, and the main methods of extraction of the active ingredient;  • to draw conclusions about plants, herbs;  • to comment on the possible benefits of medicinal plants;  • decide on the possible side effects of medicinal plants using verbs in passive diathesis;  • to know how to use the plant;  • to describe a video sequence and to express the point of view;  • to consolidate the revised grammar rules. | | 1. The world of medicinal plants.  2. Botany and pharmacognosy.  3. The language of medicinal plants.  4. Description of a medicinal plant according to pharmacodynamic indices.  *Grammar*: Personal pronouns. Direct and indirect speech. Interrogative words.  *Video*: Aloe vera - the green doctor. | |

***ENGLISH***

| **Objectives** | **Content units** | | |
| --- | --- | --- | --- |
| **Module 1. Introduction to the study of pharmaceutical terminology and historical landmarks in the field of pharmacy** | | | |
| * To integrate previous knowledge with the course requirements and the syllabus provided for pharmacy students; * to demonstrate the role of English in the process of globalization, as well as the importance of knowledge of medical English in interaction with various scientific activities; * to describe the historical landmarks regarding the founding of the university and the Faculty of Pharmacy; * to speak about illustrious representatives in the field of medicine and pharmacy (Pasteur, Flemming, etc.); * to present additional information (video or powerpoint projects) about personalities in the field of medicine and pharmacy); * to apply new knowledge and terms in statements and comments; * to draw conclusions and present additional information, using authentic scientific sources; * to extract the relevant information from a studied material; * to practice different grammatical structures in a professional context; * to revise word derivation by suffixation (-able, -ness, -ul, -ed, -ion, etc.); * to identify attitudes, opinions in an audio message; * to participate in conversations on professional topics. | * History of pharmacy. * Famous pharmacists.     *Grammar:* Present Tenses (Present Simple, Continuous, Perfect), Past Tenses (Past Simple, Cntinuous, Perfect). Derivation.Verb derivation, paraphrasing. | | |
| **Module 2. Human anatomy and physiology** | | | |
| * To define the new terms, explaining the definition of the cell, system, tissue, muscular, vascular, respiratory, digestive system, etc .; * To describe the structure, properties and functions of each system in English; * to demonstrate communication skills in real professional situations * to apply the new expressions in subsequent utterances and dialogues, as well as in the individual work with the specialized text; * to demonstrate abilities in translating specialized medical texts; * to integrate acquired knowledge in order to describe an image, chart, or map concept. * to comment on the information studied; * to complement the basic information with new information from other sources (articles, videos, online sources); * to apply knowledge related to other disciplines; * to draw conclusions; * to develop opinions regarding some specific data; * to communicate effectively in a medical professional environment. | * Cell. Definitions and notions. Cell types. Structure. Cell division (direct, indirect). Definitions of tissue, organs, systems * Skeleton. Structure and functions. Anatomical notions. * Muscular system. Structure and characteristics. Striated, smooth and cardiac muscle tissue. Voluntary and involuntary movements. * Nervous system. Structure and functions of the nervous system. Central and peripheral nervous system. * Vascular system. Structure and functions of the cardiovascular system. Types of blood vessels and their characteristics. Structure of the heart and major blood vessels. * Respiratory system. Structure and functions of the respiratory system. Notions and terms. * Digestive system. Characteristics and structure of the digestive system. Digestive tract. Accessory glands and their functions. * Endocrine system. Structure and functions of the endocrine system. Types of hormones. * *Video:* the cell, blood-vascular system, digestive system, respiratory system, ș.a. | | |
| **Module 3. Immune System** | | | |
| * to understand written and oral messages in English; * to understand relevant information; * to apply the knowledge gained in discussions and debates about the importance of immunizing the population, adverse reactions and clinical consequences of vaccination; * to identify attitudes and opinions based on an audio message; * to communicate clearly and fluently, orally / in writing, real or imaginary conversations, everyday situations, or personal experiences (pharmacist-patient dialogues); * to apply / adapt other types of communication to the particularities of the audience (formal / informal style); * to write different messages, using medical terminology; * to synthesize in writing the audio or video information. | * Immunity. Types of immunity. Immunization. * Microorganisms. Bacteria, fungi and viruses. Features and notions. * Alexander Fleming. Discovery of penicillin. Historical landmarks and the importance of vaccination. * Important discoveries in medicine and pharmacy. * *Grammar:* Future Tenses (Future Simple, Continuous, Perfect). Conditionals. Derivation of nouns / medical terms. Plural form of medical nouns / terms (*datum-data, bacilus-bacili, fungus-fungi*).   *Video:* Immune system. Microorganisms, Alexander Fleming , etc. | | |
| **Module 4. Medicinal plants** | | | |
| * to define the terms - *medicinal plant, pharmacognosy*; * to describe the structure, properties and functions of plants; * to demonstrate the benefits of medicinal plants; * to comment on the medical significance of the toxicity of medicinal plants; * to apply knowledge related to other disciplines; * to draw conclusions about medicinal plants in English; * to develop opinions on the safety and toxicity of plants in English. | | * Medicinal plants from a historical perspective. * Pharmacognosy. Botany. Plants. Plantmorphology and functions. * Medicinal plants. * Categories of medicinal plants. * Side effects, safety and toxicity of medicinal plants. * Herbology. Herbalism. Botanical medicine.   *Grammar:* Direct and indirect speech. | |
| **Module 5. Organic chemistry** | | | |
| * to define the types of nutrients in organic chemistry; * to analyze the value of basic nutrients; * to demonstrate the benefits of the elements of organic chemistry; * to apply the knowledge gained to other disciplines; * to debate about the importance of nutrients. | | * Lipids. * Carbohydrates. * Proteins. * Steroids. * Vitamins. Avitaminosis. | |
|  | | | |
| **Module 6. Administration of drugs. Routes of drug administration.** | | | |
| * To integrate previous knowledge with the received information; * to apply the knowledge about the administration of drugs; * to define the term *bioavailability*; * to explain the action of bioavailability; * to present additional information and projects on routes of drug administration and bioavailability; * to illustrate the benefits of natural and synthetic sources of drugs; * to apply new knowledge and terms in statements; * to argue the advantages and disadvantages of the routes of drug administration; * to drawconclusions; * to present additional information, consulting other authentic scientific sources; * to extract relevant information from a studied material; * to practice previously studied grammatical structures; * to use terminological expressions in a professional context; * to express opinions based on a video/audio message; * to speak about the topics approached. | * Administration of drugs. * Routes of administration of drugs. * Bioavailability. * Sources of drugs. * Natural and synthetic sources of drugs.   *Grammar:* Synonyms and antonyms. Word derivation. Suffixation and prefixation. | | |
| **Module 7.**  **Drug dosage forms** | | | |
| * To apply knowledge about drug production methods; * to identify the similarities and differences of tablets according to their shape and size; * to illustrate different types of drug dosage forms; * to describe an audio / video document about drug dosage forms; * to compare different drug dosage forms; * to classify drug dosage forms; * to exemplify the benefits and side effects of dosage forms. | * Drug dosage forms. Classification of drug dosage forms. Solid dosage forms. * Tablets. Classification, types of tablets. Advantages and disadvantages of tablets. * Liquid dosage forms. * Advantages and disadvantages of liquid dosage forms. * Semi-solid dosage forms. Advantages and disadvantages of semi-solid dosage forms.   *Grammar:* Gerund and Participle. | | |
| **Module 8. Drug quality and Pharmacovigilance** | | | |
| * To identify the drugs quality requirements; * to define the factors that determine the quality of drugs; * to identify the basic elements of the medication package leaflet; * to demonstrate the importance of the medication package leaflet; * to exemplify the requirements of drug storage; * to analyze the process of pharmacovigilance; * to draw conclusions about pharmacovigilance; * to compare the objectives of pharmacovigilance; * to express opinions about the relevance of the topics approached. | * Drug quality * Medication package insert * Drug storage requirements * Pharmacovigilance * Pharmacovigilance objectives   *Grammar:* Sequence of tenses. | | |
| **Module 9. Technologies of drug preparation** | | | |
| * To exemplify the technologies of the preparation of medicinal solutions; * to explain the procedure for tablets filtering and production; * to argue the topics approached; * to justify the similarities and differences in the preparation of drug dosage forms. | * Medicinal solutions * Filtering * Production of tablets * Extraction of drugs     *Grammar:* Types of discourses. | | |
| **Module 10. Introduction to Pharmacology** | | | |
| * To apply the new vocabulary and the correct pronunciation of the parmaceutical terms; * to define terms and expressions related to the topic; * to apply the knowledge obtained for doing the exercises; * to describethe proposed historical landmarks; * to recite the pharmacist's oath; * to summarize in writing the information read or heard; * to paraphrase the information in English; * to communicate fluently by supporting opinions in English regarding the pharmacist's responsibilities. | * Introduction to pharmacology. * Pharmacology - historical development. * Pharmaceutical fields.   *Grammar:* Interrogative sentences | | |
| **Module 11. Classification of drugs** | | |
| * To explain the pharmacological terms; * to integrate pharmaceutical terms into discourses in English; * to understand audio / video information in English on the given subject; * to reproduce in English the details of the audio / video information; * to define the types of cardiovascular diseases; * to distinguish groups of drugs and their properties; * to paraphrase a sentence using synonyms, etc; * to comment on antibiotics and their side effects using verbs in passive voice; * to apply the knowledge acquired in statements, dialogues, individual projects; * to demonstrate abilities in translating medical texts using the learned terms and expressions; * to draw conclusions; * to present additional information using different scientific sources; * to understand written and oral messages in English; * to extract the relevant information from a studied material regarding neurological, gastrointestinal, cardiovascular, antiviral drugs; * to identify attitudes, opinions from an audio/video message; * to communicate clearly and fluently, orally and in writing, real or imaginary conversations, everyday situations, or personal experiences (pharmacist-patient dialogues). | * Drug nomenclature and standards. * Classification of drugs. * Neurological drugs. * Cardiovascular drugs. * Types of cardiovascular drugs. * Gastrointestinal drugs. * Antihistamines. * Antibiotics. * Antivirals. * Drug toxicity. * Drug tolerance.     *Video:* Antiemetics. Antiviral drugs.Antipsychotics. Drug addiction.  *Grammar:* Passive voice. Linking words.  . | |
| **Module 12. Drug toxicity and Drug tolerance** | | |
| * To compare drug toxicity and drug tolerance; * to differentiate and apply new knowledge and terms in statements and comments; * to understand the relevant information from a studied material; * to write messages of different types, using medical terminology; * to use the scientific information, using new information and communication technologies; * to integrate the studied material in dialogues, essays, presentations, scientific reports, discussions, summaries etc. | • Drug toxicity  • Drug tolerance  *Video:* Drug tolerance concept and explanation  *Grammar:* Adjective | |

1. **INSTRUCTIONAL PROFESSIONAL (SPECIFIC (SS) AND TRANSVERSAL (TS) SKILLS AND LEARNING OUTCOMES**

* **Professional skills (PS):**
* PS1. Knowledge of the theoretical foundations of the disciplines included in the faculty curriculum, as well as the general principles in the development, analysis, and registration of pharmaceutical and parapharmaceutical products. Understanding the general principles of organization and operation of pharmaceutical institutions with different legal forms of activity, the legislative framework in the field of pharmacy, and the rights and obligations of pharmacists.
* PS5. Determining the criteria for evaluating the effectiveness of the pharmaceutical system and personal activity based on real conditions and in a specific social context; determining the ways to guide pharmaceutical activity based on evaluation results; identifying research issues in the field of pharmacy; understanding the methodology of scientific research in the practical activity of a pharmacist or manager of a pharmaceutical unit.
* PS6. Adapting messages to various socio-cultural environments through the use of multiple foreign languages, applying problem-solving skills in pharmaceutical activities through collaboration with doctors. Promoting principles of tolerance and compassion towards patients, and utilizing information technology in professional activities.
* **Transversal skills (TS)**
* TS1: The promotion of logical reasoning, practical applicability, evaluation, and self-evaluation in decision-making; adherence to ethical and pharmaceutical deontology standards in the preparation, analysis, transportation, and delivery of medicinal remedies to the population and medical institutions.
* TS2. Identifying the training needs based on the evolution of the pharmaceutical system. Determining priorities in the continuing professional education of pharmacists, as well as analyzing, transporting, and distributing medicinal remedies to the population and medical institutions.
* TS3. Carrying out activities and exercising specific roles in teamwork. Promoting a spirit of initiative, dialogue, cooperation, positive attitudes, and respect for others, as well as empathy, altruism, and the continuous improvement of one's own work.
* **Learning outcomes**
* Developing communication and writing skills within pharmacist /patient, patient/pharmacist doctor/ pharmacist communication;
* developing skills of understanding a written text/speech/oral message;
* acquiring the basic pharmaceutical terminology;
* developing skills for analyzing and summarizing information from authentic sources and its presentation in oral or written form;
* promoting intercultural and interdisciplinary dialogues in the field of pharmacy;

The students will be able:

* to methodically develop a presentation or description highlighting important points and details relevant to the professional field;
* to write clear and detailed texts on topics related to the pharmaceutical field, synthesizing and evaluating information and arguments from different sources;
* to understand the main ideas in terms of substance and form, on a concrete or abstract topic and in a standard language, including technical discussions in the field of pharmacy;
* to discuss on a subject that is quite familiar;
* to make a general plan of the discourse.

1. **STUDENTs` INDIVIDUAL WORK**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | The expected product | Achievement strategies | Assessment criteria | Period of accomplishment |
| 1. | Development of thematic lexicographic glossaries | Compilation of lists with terminological lexical units;  Translation of terminological lexical units;  Use of transcriptional signs;  Indication of semantic and polysemantic valences of terminological lexical units;  Contextualization of terminological lexical units. | Presentation and translation correctness of terminological lexical units | During the 1st and 2nd semesters |
| 2. | Thematic projects | Elaboration of reports and thematic communications;  Work with medical terminology  Information synthesis and summary. | Ability to extract the essence from articles. Correctness of information presentation. | During the 1st and 2nd semesters |
| 3. | Video thematic projects | Watching videos  Compilation of lists with terminological lexical units;  Filling in the video comprehension-check sheets. | Developing interpretive/translation skills in video exposure. | During the 1st and 2nd semesters |
| 4. | Individual portofolios | Completing individual portfolios with information, lexical, grammatical resources. | Degree of independent work | During the 1st and 2nd semesters |
| 5. | Work with medical/pharmaceutical journals | Elaboration of synthesis articles and reviews. | Degree of understanding and synthesis of scientific information. | During the 1st and 2nd semesters |

1. **TEACHING-LEARNING- ASSESSMENT METHODOLOGy**

***Teaching and learning methods***

* Exposure, conversation, exercise, demonstration, problem-solving, heuristic conversation, brainstorming, experiment.
* Interactive methods, communication and creativity emphasis (brainstorming, free associations, starburst, value line, SINELG, T chart, cube, Venn diagram, cinquain).
* ***Teaching strategies /techniques***
* ***inductive strategies*** (from general to particular);
* ***deductive strategies*** (from general to particular);
* ***analogic strategies*** (using models);
* ***transductive strategies;***
* ***mixed strategies:*** inductive-deductive and deductive-inductive;
* ***algorithmic strategies:*** explicative-demonstrative, intuitive, expositive, imitative, programmed and algorithmic;
* ***heuristic strategies*** - problem-solving, discovery, modeling, hypothesis formulation, heuristic dialogue, investigative experiment, brainstorming, creativity stimulation.
* ***Assessment methods*** *(including the indication of final mark calculation method )*

**Currentassessment***:*

* formative assessment
* tests
* questioning techniques
* solving problems/exercises,
* case study analysis
* concept maps
* role plays on discussed topics;
* projects (summative assessment);
* portofolios (longitudinal assessment)

**Final assessment**: 1st year, 1st sem. – Average mark -50%, Final test- 20%, Exam- 30%.

2nd sem. – Average mark - 50%, Final test- 20%, Exam- 30%.

**Scaling of marks for assessments**

**Method of mark rounding**

|  |  |  |
| --- | --- | --- |
| Intermediate marks grid (annual average, exam marks) | National grading system | ECTS  equivalent |
| **1,00-3,00** | **2** | **F** |
| **3,01-4,99** | **4** | **FX** |
| **5,00** | **5** | **E** |
| **5,01-5,50** | **5,5** |
| **5,51-6,0** | **6** |
| **6,01-6,50** | **6,5** | **D** |
| **6,51-7,00** | **7** |
| **7,01-7,50** | **7,5** | **C** |
| **7,51-8,00** | **8** |
| **8,01-8,50** | **8,5** | **B** |
| **8,51-8,00** | **9** |
| **9,01-9,50** | **9,5** | **A** |
| **9,51-10,0** | **10** |

The annual average mark and final examination marks (computer test, written test, oral test) will be expressed in numbers according to the grid of marks (see table above), while the final mark will be expressed in a number with two decimal digits, which will be recorded in the student’s report card (gradebook).

*Students` unexcused absence at the final examination is qualified with „absent” and is equivalent to „0” (zero). The students have the right to retake the failed examination twice.*

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