# MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS 

Educational Institution

## BELARUSIAN STATE MEDICAL UNIVERSITY

## Контрольный экземппяр



## PHARMACEUTICAL LATIN

Curriculum of the educational institution in the academic discipline for the specialty

7-07-0912-01 «Pharmacy»

Curriculum is based on the educational program «Pharmaceutical Latin», approved 27.06.2023, registration \# УД-091-039/2324/уч.; on the educational plan in the specialty 7-07-0912-01 «Pharmacy», approved 17.05.2023, registration \# 7-07-0912-01/2324/mf.

## COMPILERS:

N.A.Kruhlik, Head of the Latin Language Department of the educational institution «Belarusian State Medical University», Ph.D. PhD, Associate Professor;
A.Z.Tsisyk, Associate Professor of the Department Latin Language of the educational institution «Belarusian State Medical University», PhD, Associate Professor

## RECOMMENDED FOR APPROVAL:

by the Department of the Latin Language of the educational institution «Belarusian State Medical University» (protocol \# 10 of 18.05.2023);
by the Scientific and Methodological Council of the educational institution «Belarusian State Medical University»
(protocol \# 6 of 27.06.2023)

## EXPLANATORY NOTE

«Pharmaceutical Latin» is an academic discipline of the Linguistic Module which contains systematized scientific knowledge about the rules of education and use of Latin pharmaceutical terminology.

The aim of the discipline «Pharmaceutical Latin» is the formation of universal competence for pharmaceutical consulting and the sale of medicines according to a doctor's prescription.

The objectives of the discipline «Pharmaceutical Latin» are to form students' scientific knowledge about:
the correct pronunciation and reading of Latin pharmaceutical terms; botanical, pharmacognostic, chemical and clinical terminology in Latin, skills and abilities necessary for:
correct spelling (orthographically and grammatically) of patent and international non-patent names of medicinal products in Latin;
translation of terms, texts, simple sentences;
the use of pharmaceutical terms in the making and reading of a doctor's prescription.
skills and abilities required for:
translation, analysis, construction of professional biological one-word and multi-word terms;
registration of the Latin part of the doctor's prescription, the use of special Latin terminology.

The knowledge, skills and abilities acquired during the study of the academic discipline «Pharmaceutical Latin» are necessary for the successful study of the following academic disciplines: «Pharmaceutical Botany», «Pharmacognosy», «Pharmacy Technology of Drugs», «Pharmacology», «Pharmaceutical Care».

Studying the educational discipline «Pharmaceutical Latin» should ensure the formation of students' universal competence:

UC. Use knowledge of word formation and pronunciation when applying Greek-Latin medical terminology.

## As a result of studying the discipline «Pharmaceutical Language» the student should <br> know:

grammar elements (declension system, matching adjectives with nouns, preposition management, verb conjugation);
methods and means of word formation of Latin names of medicines;
fundamentals of Latin pharmaceutical nomenclature, general principles of the formation of uninominal names;

## be able to:

translate pharmaceutical terms and doctor's prescriptions without a dictionary from Latin to Russian and from Russian to Latin;
name objects in Latin in accordance with the principles of the corresponding nomenclatures (chemical, botanical, pharmacognostic, clinical);
isolate frequency segments in the composition of patented and international nonproprietary names that carry typical information about the drug;

## master:

grammatical material and the basics of pharmaceutical terminology, allowing you to read doctor's prescriptions in Latin.

Total number of hours for the study of the discipline is 213 academic hours. Classroom hours according to the types of studies: practical classes - 123 hours, student independent work (self-study) - 90 hours.

Intermediate assessment is carried out according to the syllabus of the specialty in the form of a credit ( 1 semester), in the form of a graded credit ( 2 semester).

Form of higher education - full-time.

## ALLOCATION OF ACADEMIC TIME ACCORDING TO SEMESTERS OF STUDY

| Code, name of the specialty |  | Number of academic hours |  |  |  |  |  | Form of intermediate assessment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\bar{\pi}$ | $\begin{aligned} & \text { n } \\ & \stackrel{n}{u} \\ & \stackrel{1}{E} \end{aligned}$ | including |  |  | 0000000000000 |  |
|  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { 7-07-0912-01 } \\ & \text { «Pharmacy» } \end{aligned}$ | 1 | 118 | 72 | - | - | 72 | 46 | credit |
|  | 2 | 95 | 51 | - | - | 54 | 44 | graded credit |
|  |  | 213 | 123 | - | - | 126 | 90 |  |

THEMATIC PLAN

| Section (topic) name | Number of class hours |
| :---: | :---: |
|  | practical |
| 1. Phonetics | 6 |
| 2. Morphology | 32 |
| 2.1. The noun and its grammatical categories. The $1^{\text {st }}$ declension of nouns | 2 |
| 2.2. The $2^{\text {nd }}$ declension of nouns | 2 |
| 2.3. Adjectives and their grammatical categories. Adjectives of 1-2 declensions and their agreement with nouns | 2 |
| 2.4. Verb. The dictionary form of verbs of 1-4 conjugations. Present and past participle. The verb esse | 2 |
| 2.5. Formation of Imperativus. Conjunctivus praesentis activi et passivi. The verb faire. Subordinate clauses of the aim with the conjunction ut | 2 |
| 2.6. The $3^{\text {rd }}$ declension of nouns. Masculine gender of nouns of the $3^{\text {rd }}$ declension. Consonant type of the $3^{\text {rd }}$ declension | 2 |
| 2.7. Feminine nouns of the $3^{\text {rd }}$ declension. Mixed type of the 3rd declension | 2 |
| 2.8. Neuter nouns of the $3^{\text {rd }}$ declension. Vowel type $3^{\text {rd }}$ declension | 2 |
| 2.9. Adjectives and participles of the $3^{\text {rd }}$ declension | 2 |
| 2.10. Comparative and superlative adjectives | 2 |
| 2.11. Nouns of the $4^{\text {th }}$ and $5^{\text {th }}$ declension | 2 |
| 2.12. Prepositions and prepositional management | 2 |
| 2.13. Numerals in pharmaceutical terminology | 2 |
| 2.14. Pronouns. Adverbs. Conjunctions | 2 |
| 2.15. Practical work in the translation of pharmaceutical terms | 4 |
| 3. Chemical and biochemical terminology | 10 |
| 3.1. Latin chemical terminology. Names of acids, oxides and hydroxides | 2 |
| 3.2. Latin chemical terminology. Names of salts | 4 |
| 3.3. Names of vitamins, hormones and enzymes. Designation of the duration or intensity of the action of drugs | 2 |
| 3.4. Practical work in the translation of chemical terms | 2 |
| 4. Latin botanical names | 6 |
| 4.1. Rules for the making of Latin botanical names | 2 |
| 4.2. Pharmaceutical equivalents of botanical names | 4 |
| 5. Prescreption | 32 |
| 5.1. Rules for making a doctor's prescription, taking into account the rules of Latin grammar and spelling | 2 |
| 5.2. The use of Accusativus singularis dosage forms when | 2 |


| Section (topic) name | Number of class <br> hours |
| :--- | :---: |
|  | practical |
| prescribing doctor's prescriptions |  |
| 5.3. The use of Accusativus pluralis dosage forms when <br> prescribing doctor's prescriptions | 2 |
| 5.4. Systematization of names of solid dosage forms and <br> features of their making and prescribing in doctor's prescriptions | 4 |
| 5.5. Systematization of names of liquid dosage forms and their <br> prescribing in doctor's prescriptions | 4 |
| 5.6. Systematization of names of soft dosage forms and their <br> prescribing in doctor's prescriptions | 4 |
| 5.7. Systematization of names of dosage forms. Non-standard <br> dosage forms | 2 |
| 5.8. Abbreviations in doctor's prescriptions | 2 |
| 5.9. Systematization of frequency segments with complex <br> spelling | 6 |
| 5.10. Systematization of exceptions to spelling rules reflected in <br> the system of frequency segments | 4 |
| $\mathbf{6 .}$ Typical groups of nomenclature names | 2 |
| 6.1. The nomenclature of medicines. Typical groups of <br> nomenclature names. The first type group: names of medicinal <br> raw materials and products of primary processing (gums, resins) | 2 |
| 6.2. The nomenclature of medicines. Typical groups of <br> nomenclature names. The second type group: extracts from <br> vegetable raw materials | 2 |
| 6.3. The nomenclature of medicines. Typical groups of <br> nomenclature names. The third type group: trivial names of <br> medicinal substances (individual substances extracted from <br> plants; some substances of animal origin; synthetic organic <br> substances) | 2 |
| 6.4. The nomenclature of medicines. Typical groups of <br> nomenclature names. The fourth typical group: International <br> nonproprietary names (INN) of medicinal substances | 2 |
| 6.5. Trade names of medicines (preparations) | 2 |
| 6.6. The nomenclature of medicines. Typical groups of <br> nomenclature names. The fifth type group: serums, vaccines, <br> anatoxins | 2 |
| 6.7. Practical work in the translation of terms with <br> nomenclature names | 2 |
| 7. Clinical terminology | 2 |
| 7.1. Latin clinical terminology. One-word and multi-word <br> terms. Initial and final term elements | 2 |
| 7.2. Names of functional disorders, pathological processes and | 2 |


| Section (topic) name | Number of class hours |
| :---: | :---: |
|  | practical |
| conditions |  |
| 7.3. Names of qualitative and quantitative deviations from the norm | 2 |
| 7.4. Names of inflammatory diseases | 2 |
| 7.5. Names of endogenous pathological changes and formations | 2 |
| 7.6. Multi-word clinical terms | 6 |
| 7.7. Practical work in translation of clinical terms | 3 |
| Total hours | 123 |

## CONTENT OF THE EDUCATIONAL MATERIAL

## 1. Phonetics

Introduction to Latin medical terminology. Latin alphabet. Rules for pronunciation of letters and letter combinations. General rules of stress setting. The length and brevity of the penultimate syllable. Special cases of stress setting. Naming objects in Latin in accordance with the principles of the corresponding nomenclatures.

## 2. Morphology

2.1. The noun and its grammatical categories. The $\mathbf{1}^{\text {st }}$ declension of nouns

Categories of gender, number, case. Dictionary form and division of nouns by declension. Definition of the basis of nouns. The $1^{\text {st }}$ declension of nouns. The $1^{\text {st }}$ Greek declension.

Rules for the use of capital letters of nouns in the making of pharmaceutical terms. The concept of medicinal forms. Inconsistent attribute. Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 2.2. The $2^{\text {nd }}$ declension of nouns

Masculine and neuter nouns of the $2^{\text {nd }}$ declension.
Exceptions to the rules about the gender of nouns of the $2^{\text {nd }}$ declension. Names of trees.

Case endings of nouns of the $2^{\text {nd }}$ declension. Nouns of the $2^{\text {nd }}$ declension in the role of names of medicines.

Methods of formation of names of medicines: basic structure, abbreviation, prefix, suffixation. Names of medicines with suffixes - in-, -id-, -ol-.

Frequency segments in patented and international nonproprietary names of medicines (Part 1). Translation, analysis and construction of professionally biological one-word and multi-word terms.
2.3. Adjectives and their grammatical categories. Adjectives of 1-2 declensions and their agreement with nouns

Adjectives in Latin and their grammatical categories. Adjectives of 1-2 declensions and the definition of their basis. Matching adjectives with nouns (agreed
definition). The place of the adjective in a verbose pharmaceutical term. Adjectives suffixes 1-2 declensions (-an-, -at-, -an-, -ĭt-, -ōs-). Frequency segments (part 2). Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 2.4. Verb. The dictionary form of verbs of $1-4$ conjugations. Present and past participle. The verb esse

The main grammatical categories of the Latin verb. Infinitive and 4 verb conjugations. The dictionary form of the verb. The basis of the present tense. The present participle. Praesens indicativi activi et passivi (the $3^{\text {rd }}$ person singular and plural). The basis of the supine and past participle (Participium perfecti passivi). The verb esse in present tense forms. The word order in a simple sentence. Frequency segments (part 3). Translation, analysis and construction of professionally biological one-word and multi-word terms.
2.5. Formation of Imperativus. Conjunctivus praesentis activi et passivi. The verb faire. Subordinate clauses of the aim with the conjunction ut

Formation of Imperativus. Formation of Conjunctivus praesentis activi et passivi (the $3^{\text {rd }}$ person singular and plural). The verb faire in Conjunctivus praesentis activi. (the $3^{\text {rd }}$ person singular and plural). Subordinate clauses of the aim with the conjunction ut and the forms fiat/fiant. Frequency segments (part 4). Translation, analysis and construction of professionally biological one-word and multi-word terms.
2.6. The $3^{\text {rd }}$ declension of nouns. Masculine gender of nouns of the $3^{\text {rd }}$ declension. Consonant type of the $3^{\text {rd }}$ declension

Three grammatical types of nouns of the $3^{\text {rd }}$ declension. Systematization of the endings of masculine nouns of the $3^{\text {rd }}$ declension. Exceptions to the rules about the masculine gender. Consonant type of the $3^{\text {rd }}$ declension. Suffixes -or, -tor, -tor. Nomenclature names with the noun liquor. Frequency segments (part 5). Translation, analysis and construction of professionally biological one-word and multi-word terms.
2.7. Feminine nouns of the $3^{\text {rd }}$ declension. Mixed type of the $3^{\text {rd }}$ declension

Systematization of the endings of feminine nouns of the $3^{\text {rd }}$ declension. Exceptions to the rules about the feminine gender.

Mixed type of the $3^{\text {rd }}$ declension. Features of declension of nouns to -sis and nouns tussis, pertussis, febris. Frequency segments (part 6). Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 2.8. Neuter nouns of the $3^{\text {rd }}$ declension. Vowel type $3^{\text {rd }}$ declension

Systematization of the endings of neuter nouns of the $3^{\text {rd }}$ declension. Exceptions to the rules of the neuter gender. Vowel type of the $3^{\text {rd }}$ declension.

Features of declension of the noun vas, vasis and words of Greek origin with the ending -ma. Frequency segments (part 7). Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 2.9. Adjectives and participles of the $3^{\text {rd }}$ declension

Adjectives of the $3^{\text {rd }}$ declension with three, two and one generic ending. Declension of adjectives of the $3^{\text {rd }}$ declension and present participles. Matching adjectives and participles of the $3^{\text {rd }}$ declension with nouns. Suffixes of adjectives of the

3rd declension - alis/ aris, -bĭlis, -ilis, -ensis. Frequency segments (part 8). Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 2.10. Comparative and superlative adjectives

Formation and declension of a comparative degree. Matching adjectives to a comparative degree with nouns. Features of the use of the comparative degree of adjectives with nouns. Formation and declension of the superlative degree (suffixes -issim-, -rim-, -lim-). Matching adjectives in the superlative with nouns. Incorrect and insufficient degrees of comparison of adjectives in medical and pharmaceutical terminology. Frequency segments (part 9). Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 2.11. Nouns of the $4^{\text {th }}$ and $5^{\text {th }}$ declension

Declension of masculine and neuter nouns of the 4th declension. Exceptions from the genus of nouns of the $4^{\text {th }}$ declension. Case endings of nouns of the $5^{\text {th }}$ declension. The meaning of the noun species in botany and pharmacognosy. Preparation and names of medicinal fees. Frequency segments (part 10). Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 2.12. Prepositions and prepositional management

Prepositions used with Accusativus. Prepositions used with Ablativus. Prepositions used with Accusativus et Ablativus. Prepositions used with Genetivus. Frequency segments in trivial names of medicines. Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 2.13. Numerals in pharmaceutical terminology

Latin quantitative numerals $1-15,20,30,40,50,100,1000$.
Declension of numerals $1,2,3$. Agreement of quantitative numerals with nouns. Ordinal numbers $1^{\text {st }}-15^{\text {th }}$. Latin and Greek numerals from 1 to 12 as prefixes in pharmaceutical terms. Frequency segments (part 11). Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 2.14. Pronouns. Adverbs. Conjunctions

Terms with pronouns pro me, per se. Adverbs cito, citisimo, statim, quantum satis. Conjunctions et, aequi, aut, sea, side, ut. Frequency segments (part 12). Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 2.15. Practical work in the translation of pharmaceutical terms

Writing words with complex spelling. Translation of simple and complex sentences. Translation of sentences with verbs in the imperative mood. Translation, analysis and construction of professionally biological one-word and multi-word terms.

## 3. Chemical and biochemical terminology

### 3.1. Latin chemical terminology. Names of acids, oxides and hydroxides

Names of chemical elements, acids, oxides, hydroxides and peroxides. Frequency segments (part 13). Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 3.2. Latin chemical terminology. Names of salts

Latin names of salts of oxygen and oxygen-free acids. The names of substances formed on the model of the names of salts. Frequency segments (part 14). Translation, analysis and construction of professionally biological one-word and multi-word terms.
3.3. Names of vitamins, hormones and enzymes. Designation of the duration or intensity of the action of drugs

Names of vitamins. Names of hormonal medicines. Names of enzyme medicines. Designation of the duration or intensity of the action of drugs. Frequency segments (part 15). Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 3.4. Practical work in the translation of chemical terms

Translation of terms containing pharmaceutical information. Translation, analysis and construction of professionally biological one-word and multi-word terms.

## 4. LATIN BOTANICAL TERMINOLOGY

### 4.1. Rules for the making of Latin botanical names

Systematization of names of parts of medicinal plants. Names of medicinal plant raw materials. Translation, analysis and construction of professionally biological oneword and multi-word terms.

### 4.2. Pharmaceutical equivalents of botanical names

Names of botanical families. The names of the components of essential oils, alkaloids and glycosides. Translation, analysis and construction of professionally biological one-word and multi-word terms.

## 5. Prescreption

5.1. Rules for making a doctor's prescription, taking into account the rules of Latin grammar and spelling

The doctor's prescription and its structure. A simple and complex prescription. Latin names of parts of a doctor's prescription. The syntax of the recipe line. Features of dose expression in a doctor's prescription. Latinization of the names of medicines when making a doctor's prescription. Reading doctor's prescriptions in Latin.

### 5.2. The use of Accusativus singularis dosage forms when prescribing doctor's prescriptions

Registration in Accusativus singularis of dosage forms: aerosol, balm, gel, cream, liniment, ointment, patch, medical pencil, etc.

Alternative options for prescribing dosage forms. Reading doctor's prescriptions in Latin.
5.3. The use of Accusativus pluralis dosage forms when prescribing doctor's prescriptions

Registration in Accusativus pluralis of dosage forms: tablets, pills, capsules, lozenges, sponges, suppositories, mustard plasters.

Registration in Accusativus pluralis of dosage forms with indication of the active medicinal substance (tablets, lozenges, capsules, ampoules, suppositories, глазные пленки, sponges, napkins, etc.).

Alternative options for prescribing dosage forms. Reading doctor's prescriptions in Latin.

### 5.4. Systematization of names of solid dosage forms and features of their making and prescribing in doctor's prescriptions

Registration of names of medicines with solid dosage forms: powder, tablet, capsule, granule, collection, sponge, suppositories.

Prescribing solid dosage forms in doctor's prescriptions.
Registration of solid dosage forms in the passport of written control. Reading doctor's prescriptions in Latin.
5.5. Systematization of names of liquid dosage forms and their prescribing in doctor's prescriptions

Registration of names of medicines in liquid dosage forms: tinctures, infusions, decoctions, potions, solutions, extracts, emulsions, suspensions, drops, oils, syrups. Features of presentation of names of medicines in liquid dosage forms in the State Pharmacopoeia of the Republic of Belarus. Registration of liquid dosage forms in the passport of written control. Prescribing liquid dosage forms in doctor's prescriptions. Reading doctor's prescriptions in Latin.

### 5.6. Systematization of names of soft dosage forms and their prescribing

 in doctor's prescriptionsRegistration of names of medicines in soft dosage forms: balms, ointments, liniments, plasters, pastes.

Registration of soft dosage forms in the passport of written control. Prescribing soft dosage forms in doctor's prescriptions. Reading doctor's prescriptions in Latin.

### 5.7. Systematization of names of dosage forms. Non-standard dosage forms

The use of non-standard dosage forms in modern medical practice. Prescribing them in prescriptions. Reading doctor's prescriptions in Latin.

### 5.8. Abbreviations in doctor's prescriptions

Rules for abbreviations of nouns, adjectives and verbs.
Cases of variation in the method of abbreviations. Reading doctor's prescriptions in Latin.

### 5.9. Systematization of frequency segments with complex spelling

Systematization of frequency segments with complex spelling. Segments -aesth-, -aesthes-, -asthes-, camph-, -esthes-, -aeth, -anth-, -az-, -(a)zid-, zin-, -(a)zol-, -(a)zon-, -benz-, -cain-, card-, -cid-, -cillin-, -cord-, -cyan-, -cycl(o)-, -cyclin-, cyt-, -eph-, -ephedr-, -phedr-, -ery-, -erythr-, , form-, -fung-, -fura-, -glyc(y)-, -haem-, -hydr-, -hyd-, ichthy-, -lys-, -lysin-, -lytin-, -menth-, -meth-, -morph-, -myc(o)-, -mycin-, -naphth-, -oestr-, -oxy-, -ozo-, phosph-, phtha(l)-, -phthor-, ,-phyll-, -phyt-, -poly-, -pyr-, -rheo-, strept-, stroph-, -sulf(a)-, -test-, ,the(o)-, -thi(o)-, -thromb-, -thym-, thyr(e)o-, -yl-, -zep-, -zepam-, -zym-, -zy-. Reading doctor's prescriptions in Latin.

### 5.10. Systematization of exceptions to spelling rules reflected in the system of frequency segments

Exceptions: terms adenosidtriphosphoricus, Adonisidum, aërosolum, Aestifanum, Aspirinum, Benzoylperoxidum, Chinosolum, Cortisonum,

Desoxycorticosteronum, Dexamethasonum, Digitoxinum, etacrynicus, Furacilinum, Gramicidinum, Hydrocortisonum, Lysenilum, Methyluracilum, Mycosolonum, Oxycyclosolum, Phthoruracilum, Polyaethylenoxidum, Prednidsolonum, Pyridoxinum, Remantadinum, Rutinum, Sulfadimethoxinum, Terebinthina, Terrilytinum, Triticum. Reading doctor's prescriptions in Latin.
6. TYPICAL GROUPS OF NOMENCLATURE NAMES
6.1. The nomenclature of medicines. Typical groups of nomenclature names. The first type group: names of medicinal raw materials and products of primary processing (gums, resins)

Classification of medicines by standard nomenclature groups. Names of products of primary processing of raw materials. Translation, analysis and construction of professionally biological one-word and multi-word terms.
6.2. The nomenclature of medicines. Typical groups of nomenclature names. The second type group: extracts from vegetable raw materials

The second typical group. Names of extracts from vegetable raw materials. Translation, analysis and construction of professionally biological one-word and multi-word terms.
6.3. The nomenclature of medicines. Typical groups of nomenclature names. The third type group: trivial names of medicinal substances (individual substances extracted from plants; some substances of animal origin; synthetic organic substances)

Systematic and trivial names. Generating and non-derivative words (basics). Neologisms. Signs of motivation. Methods of word formation. Trivial names of glycosides, alkaloids. Translation, analysis and construction of professionally biological one-word and multi-word terms.
6.4. The nomenclature of medicines. Typical groups of nomenclature names. The fourth typical group: International nonproprietary names (INN) of medicinal substances

International nonproprietary names recommended by WHO.
Trade names of medicines (preparations).
Trade or brand names that are the commercial property of the pharmaceutical company that produces the medicine. Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 6.5. Trade names of medicines (preparations)

Features of the translation of trade names of medicines. Translation, analysis and construction of professionally biological one-word and multi-word terms.
6.6. The nomenclature of medicines. Typical groups of nomenclature names. The fifth type group: serums, vaccines, anatoxins

Features of the translation of the names of serums, vaccines and toxoids into Latin. Translation, analysis and construction of professionally biological one-word and multi-word terms.
6.7. Practical work in the translation of terms with nomenclature names

Translation of drug names in accordance with INN. Equivalents of trade names. Translation, analysis and construction of professionally biological one-word and multi-word terms.

## 7. CLINICAL TERMINOLOGY

### 7.1. Latin clinical terminology. One-word and multi-word terms. Initial and final term elements

Introduction to clinical terminology. Structural varieties of clinical terms. Initial and final term elements. The method of composing one-word terms by adding initial and final term elements. Terms - names of biomedical and medical specialties and specialists. Pharmacist. Naming objects in Latin in accordance with the principles of the corresponding nomenclatures.

### 7.2. Names of functional disorders, pathological processes and conditions

Terms with a prefixed form of formation (prefixes a- $/$ an-, dys-, in- / im-, con- / com-- / cor- / col-, dia-, en- / endo-, epi-, syn- /sym-).

Terms with a suffixal form of formation (suffixes -ōsis, -ismus, -ēma, -iăsis).

Terms formed by folding the initial and final term elements.
Terms that include only one basis. Naming objects in Latin in accordance with the principles of the corresponding nomenclatures.

### 7.3. Names of qualitative and quantitative deviations from the norm

Terms with a prefixed form of formation (prefixes hyper-/hypo-, para-, peri-, endo-). Terms with a suffix -ōsis.

Terms formed by adding initial and final term elements. Naming objects in Latin in accordance with the principles of the corresponding nomenclatures.

### 7.4. Names of inflammatory diseases

Terms formed with the suffix -itis and clarifying prefixes (para-, peri-, endo-).
One-word terms with the meaning "inflammation".
Terms denoting the accumulation of liquid and gaseous substances. Naming objects in Latin in accordance with the principles of the corresponding nomenclatures.

### 7.5. Names of endogenous pathological changes and formations

Names of neoplasms. Names of ulcerative tissue lesions. Names of rashes (eruptions) and skin diseases. Names of concretions Naming objects in Latin in accordance with the principles of the corresponding nomenclatures.

### 7.6. Multi-word clinical terms

Structure and composition of wordy clinical terms. Verbose clinical terms that convey the localization of diseases. Verbose clinical terms that convey a qualitative or quantitative characteristic of the disease. Translation, analysis and construction of professionally biological one-word and multi-word terms.

### 7.7. Practical work in translation of clinical terms

Translation of one-word and multi-word clinical terms. Translation, analysis and construction of professionally biological one-word and multi-word terms.
ACADEMIC DISCIPLINE CURRICULAR CHART

|  | Section (topic) name | number of hours practical | - | Form of control |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 semester |  |  |  |
| 1 | Phonetics | 6 | 3 |  |
| 1.1 | Introduction to Latin medical terminology | 2 | 1 | interview |
| 1.2 | Latin alphabet Rules for pronunciation of letters and letter combinations | 2 | 1 | interview |
| 1.3 | Accent rules | 2 | 1 | interview |
| 2 | Morphology | 32 | 21 |  |
| 2.1 | The noun and its grammatical categories. The $1^{\text {st }}$ declension of nouns | 2 | 2 | interview |
| 2.2 | The 2nd declension of nouns | 2 | 1 | control questions |
| 2.3 | Adjectives and their grammatical categories. Adjectives of 1-2 declensions and their agreement with nouns | 2 | 2 | control questions |
| 2.4 | Verb. The dictionary form of verbs of 1-4 conjugations. Present and past participle. The verb esse | 2 | 1 | control questions |
| 2.5 | Formation of Imperativus. Conjunctivus praesentis activi et passivi. The verb faire. Subordinate clauses of the aim with the conjunction ut | 2 | 2 | test |
| 2.6 | The 3 rd declension of nouns. Masculine gender of nouns of the $3^{\text {rd }}$ declension. Consonant type of the $3^{\text {rd }}$ declension | 2 | 1 | control questions |
| 2.7 | Feminine nouns of the 3rd declension. Mixed type of the $3^{\text {rd }}$ declension | 2 | 2 | electronic test |
| 2.8 | Neuter nouns of the 3rd declension. Vowel type $3^{\text {rd }}$ declension | 2 | 2 | control questions |
| 2.9 | Adjectives and participles of the $3^{\text {rd }}$ declension | 2 | 2 | control questions |
| 2.10 | Comparative and superlative adjectives | 2 | 2 | control questions |
| 2.11 | Nouns of the $4^{\text {th }}$ and $5^{\text {th }}$ declension | 2 | - | electronic test |

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| 2.12 | Prepositions and prepositional management | 2 | 2 | test |
| :---: | :--- | :--- | :--- | :--- |
| 2.13 | Numerals in pharmaceutical terminology | 2 | - | control questions |
| 2.14 | Pronouns. Adverbs. Conjunctions | 2 | 1 | control questions |
| 2.15 | Compilation of multi-word pharmaceutical terms | 2 | - | electronic test |
| 2.15 | Practical work in the transiation of pharmaceutical terms | 2 | 1 | control work |
| $\mathbf{3}$ | Chemicai and biochemical terminology | $\mathbf{1 0}$ | $\mathbf{6}$ |  |
| 3.1 | Latin chemical terminology. Names of acids, oxides and tydroxides | 2 | 2 | test |
| 3.2 | Latin chemical terminology. Names of oxygen-containing and oxygen- <br> free anions | 2 | 2 | tests |
| 3.2 | Latin chemical terminology. Names of salts | 2 | - | control questions |
| 3.3 | Names of vitamins, hormones and enzymes. Designation of the duration <br> or intensity of the acion of drugs | 2 | 2 | electronic test |
| 3.4 | Practical work in the translation of chemical terms | 2 | - | control questions |
| 4 | Latin botanical names | $\mathbf{6}$ | $\mathbf{4}$ |  |
| 4.1 | Rules for the making of Latin botanical names | 2 | 2 | control questions |
| 4.2 | Pharmaceutical equivalents of botanical names | 2 | 2 | control questions |
| 4.2 | Practical work on the translation of Latin botanical terminology | $\mathbf{2}$ | control work |  |
| $\mathbf{5}$ | Prescreption | 2 | $\mathbf{2 3}$ |  |
| 5.1 | Rules for making a doctor's prescription, taking into account the rules of <br> Latin grammar and spelling | 2 | 2 | control questions |
| 5.2 | The use of Accusativus singularis dosage forms when prescribing <br> doctor's prescripions | 2 | 2 | control questions |
| 5.3 | The use of Accusativus pluralis dosage forms when prescribing doctor's <br> prescriptions | 2 | 2 | control questions |
| 5.4 | Systematization of names of solid dosage forms and features of their <br> making and prescribing in doctor's prescriptions | 2 | 2 | control questions |
| 5.4 | Compilation of pharmaceutical terms containing the names of solid <br> dosage forms | 2 | - | control questions |
| 5.5 | Systematization of names of liquid dosage forms and their prescribing in <br> doctor's prescriptions | 2 | control questions |  |

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| 6.6 | The nomenclature of medicines. Typical groups of nomenclature names. <br> The fifth type group: serums, vaccines, anatoxins | 2 | 2 | electronic test |
| :---: | :--- | :--- | :--- | :--- |
| 6.7 | Compilation of pharmaceutical terms in accordance with INN and trade <br> names | 2 | 2 | control questions |
| 6.7 | Practical work in the translation of terms with nomenclature names | 2 | 2 | control work |
| 7. | Clinical terminology | $\mathbf{2 1}$ | $\mathbf{1 4}$ |  |
| 7.1 | Latin clinical terminology. One-word and multi-word terms. Initial and <br> final term elements | 2 | 2 | electronic test |
| 7.2 | Names of functional disorders, pathological processes and conditions | 2 | 2 | control questions |
| 7.2 | Names denoting the accumulation of fluids in tissues and organs, <br> blockage of blood vessels, stopping the flow of liquid substances | 2 | 1 | control questions |
| 7.3 | Names of qualitative and quantitative deviations from the norm | 2 | 1 | control work |
| 7.4 | Names of inflammatory diseases | 2 | 1 | control questions |
| 7.5 | Names of endogenous pathological changes and formations | 2 | 1 | control questions |
| 7.6 | Multi-word clinical terms denoting functional disorders 2 <br> electronic test  |  |  |  |
| 7.6 | Multi-word clinical terms, qualitative and quantitative deviations from <br> the norm | 2 | 2 | control questions |
| 7.6 | Multi-word clinical terms denoting inflammatory diseases | 2 | 2 | control questions |
| 7.7 | Translation of wordy clinical terms | 2 | 2 | control work |
| 7.7 | Practical work in translation of clinical terms | $\mathbf{1}$ | graded credit |  |
|  | Total hours | $\mathbf{9 0}$ |  |  |

## INFORMATION AND INSTRUCTIONAL UNIT

## LITERATURE

## Basic (relevant):

1. Tsisyk, A. Z. The pharmaceutical Latin : учеб. пособие в $2-\mathrm{x}$ ч. 1 / А. З. Цисык: пер. на англ. яз. А. З. Цисык - Минск : БГМУ, 2023. - 212 с.
2. Tsisyk, A. Z. The pharmaceutical Latin : учеб. пособие в 2 -х ч. 2 / А. З. Цисык: пер. на англ. яз. А. З. Цисык - Минск : БГМУ, 2023. -112 с.

Additional:
3. Обцая рецептура $=$ General prescription : учеб.-метод. пособие. Минск : БГМУ, 2017.-32 с.

METHODOL OGICAL RECOMMENDATIONS FOR THE ORGANIZATION AND
PERFORMANCE OF STUDENT INDEPENDENT WORK IN THE ACADEMIC DISCIPLINE
Main forms of student independent work:
preparation for practical classes;
preparation for colloquiums, credits in the academic discipline;
elaboration of topics (questions) submitted for independent study;
performing research and creative tasks;
performing practical tasks;
compilation of a thematic selection of literary sources, Internet sources.

The main methods of organizing independent work:
writing and presentation of the abstract;
presentation of the report;
study of topics and problems that are not brought to practical classes;
computer testing.

Control of student independent work is carried out in the form of:
control work;
final lesson, colloquium in the form of an oral interview, written work, testing; discussion of abstracts;
evaluation of an oral answer to a question, a message, a report in practical classes;
verification of abstracts, written reports, reports, doctor's prescriptions.

## LIST OF AVAILABLE DIAGNOSTIC TOOIS

The following forms are used for competences assessment:
Oral form:
interviews.

## Written form:

tests;
control questions;
control works.

## Oral-written form:

credit;
graded credit.
Technical form:
electronic tests.

## LIST OF AVAILABLE TEACHING METHODS

Traditional method (practicals);
Active (interactive) methods:
Problem-Based Learning (PBL);
Research-Based Learning (RBL).

## LIST OF PRACTICAL SKILLS

1. Translation, analysis and construction of professionally biological oneword and multi-word terms.
2. Naming objects in Latin in accordance with the principles of the corresponding nomenclatures.
3. Reading doctor's prescriptions in Latin.

## LIST OF PRACTICAL STUDIES

## 1st semester

1. Introduction to Latin medical terminology.
2. Latin alphabet. Rules for pronunciation of letters and letter combinations.
3. Accent rules.
4. The noun and its grammatical categories. The $1^{\text {st }}$ declension of nouns.
5. The $2^{\text {nd }}$ declension of nouns.
6. Adjectives and their grammatical categories. Adjectives of 1-2 declensions and their agreement with nouns.
7. Verb. The dictionary form of verbs of 1-4 conjugations. Present and past participle. The verb esse.
8. Formation of Imperativus. Conjunctivus praesentis activi et passivi. The verb faire. Subordinate clauses of the aim with the conjunction ut.
9. The $3^{\text {rd }}$ declension of nouns. Masculine gender of nouns of the $3^{\text {rd }}$ declension. Consonant type of the $3^{\text {rd }}$ declension.
10. Feminine nouns of the $3^{\text {rd }}$ declension. Mixed type of the $3^{\text {rd }}$ declension.
11. Neuter nouns of the $3^{\text {rd }}$ declension. Vowel type $3{ }^{\text {rd }}$ declension.
12. Adjectives and participles of the $3^{\text {rd }}$ declension.
13. Comparative and superlative adjectives.
14. Nouns of the $4^{\text {th }}$ and $5^{\text {th }}$ declension.
15. Numerals in pharmaceutical terminology.
16. Prepositions and prepositional management.
17. Pronouns. Adverbs. Conjunctions.
18. Compilation of multi-word pharmaceutical terms.
19. Practical work in the translation of pharmaceutical terms.
20. Latin chemical terminology. Names of acids, oxides and hydroxides.
21. Latin chemical terminology. Names of oxygen-containing and oxygen-free anions.
22. Latin chemical terminology. Names of salts.
23. Names of vitamins, hormones and enzymes. Designation of the duration or intensity of the action of drugs.
24. Practical work in the translation of chemical terms.
25. Rules for the making of Latin botanical names.
26. Pharmaceutical equivalents of botanical names.
27. Practical work on the translation of Latin botanical terminology.
28. Rules for making a doctor's prescription, taking into account the rules of Latin grammar and spelling.
29. The use of Accusativus singularis dosage forms when prescribing doctor's prescriptions.
30. The use of Accusativus pluralis dosage forms when prescribing doctor's prescriptions.
31. Systematization of names of solid dosage forms and features of their making and prescribing in doctor's prescriptions.
32. Compilation of pharmaceutical terms containing the names of solid dosage forms Systematization of names of liquid dosage forms and their prescribing in doctor's prescriptions.
33. Compilation of pharmaceutical terms containing the names of liquid dosage forms.
34. Systematization of the names of soft dosage forms and their prescribing in doctor's prescriptions.
35. Practical work on the translation of pharmaceutical terms containing the names of solid, liquid and soft dosage forms.

## 2nd semester

1. Systematization of names of dosage forms. Non-standard dosage forms.
2. Abbreviations in doctor's prescriptions.
3. Systematization of frequency segments with complex spelling.
4. Systematization of exceptions to spelling rules reflected in the system of frequency segments.
5. Practical work on writing pharmaceutical terms with complex spelling.
6. Systematization of exceptions to spelling rules reflected in the system of frequency segments.
7. Practical work on prescribing names of medicines with complex spelling.
8. The nomenclature of medicines. Typical groups of nomenclature names. The first type group: names of medicinal raw materials and products of primary processing (gums, resins).
9. The nomenclature of medicines. Typical groups of nomenclature names. The second type group: extracts from vegetable raw materials.
10. The nomenclature of medicines. Typical groups of nomenclature names. The third type group: trivial names of medicinal substances (individual substances extracted from plants; some substances of animal origin; synthetic organic substances).
11. The nomenclature of medicines. Typical groups of nomenclature names. The fourth typical group: International nonproprietary names (INN) of medicinal substances.
12. Trade names of medicines (preparations) The nomenclature of medicines. Typical groups of nomenclature names. The fifth type group: serums, vaccines, anatoxins.
13. Compilation of pharmaceutical terms in accordance with INN and trade names.
14. Practical work in the translation of terms with nomenclature names.
15. Latin clinical terminology. One-word and multi-word terms. Initial and final term elements Names of functional disorders, pathological processes and conditions.
16. Names denoting the accumulation of fluids in tissues and organs, blockage of blood vessels, stopping the flow of liquid substances.
17. Names of qualitative and quantitative deviations from the norm.
18. Names of inflammatory diseases Names of endogenous pathological changes and formations.
19. Multi-word clinical terms denoting functional disorders.
20. Multi-word clinical terms, qualitative and quantitative deviations from the norm.
21. Multi-word clinical terms denoting inflammatory diseases.
22. Compilation of one-word clinical terms with a given meaning.
23. Translation of wordy clinical terms.
24. Practical work in translation of clinical terms.
PROTOCOL OF THE CURRICULUM APPROVAL
BY OTHER DEPARTMENTS

| Title of the discipline requiring <br> approval | Department | Amendments to the <br> curriculum in the <br> academic discipline | Decision of the department, <br> which designed the curriculum <br> (date, protocol \# ) |
| :--- | :--- | :--- | :--- |
| 1. Russian Language as Foreigh <br> Language | Belarusian and Russian <br> languages | No offers | protocol \# 10 of 18.05.2023 |

## COMPILERS/AUTHORS:

Head of the Latin Language Department of the educational institution «Belarusian State Medical University», \associate Professor

N.A.Kruhlik

Associate Professor of the Latin Language Department of the educational institution «Belarusian State Medical University», PhD, Associate Professor


Curriculum content, composition and the accompanying documents comply with the estáablished requirements.

Dean of the Medical Faculty for International Students of the educational institution «Belarusian State Medical University»
$\qquad$
Methodologist of the educational institution «Belarusian State Medical University»
26.06. 2023

S.V.Zaturanova

