

*A. Kulichenko, T. Titiyevska, M. Kalashnikova, M. Martanova*

## **THE LATIN LANGUAGE AND MEDICAL TERMINOLOGY**

### **PART II. PHARMACEUTICAL AND CLINICAL TERMINOLOGY**

#### **METHODOLOGICAL MANUAL**

for Teachers Who Conduct Practical Classes  
for the First-Year Students of the Medical Faculties  
with the English Medium of Instruction,  
Specialty 222 “General Medicine”



**Zaporizhzhia**

**2019**

**Zaporizhzhia State Medical University  
Department of Foreign Languages**

**A. Kulichenko, T. Titiyevska,  
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**UDC 811.124:[001.4:615](072)**

**L36**

*A methodological manual is approved and recommended for using in learning process by the Central Methodical Commission of Zaporizhzhia State Medical University (record No. 1 from September 26, 2019).*

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**The Latin Language and Medical Terminology. Part II. Pharmaceutical and**

**L36 Clinical Terminology. Methodological Manual for Teachers Who Conduct Practical Classes for the First-Year Students of the Medical Faculties with the English Medium of Instruction, Specialty 222 “General Medicine” = Латинська мова та медична термінологія. Ч. II. Фармацевтична та клінічна термінологія : метод. посіб. для викл., які пров. пр. зан. для студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / A. Kulichenko, T. Titiyevska, M. Kalashnikova, M. Martanova. – Zaporizhzhia : [ZSMU], 2019. – 154 p.**

The methodological manual for teachers who conduct practical classes for the first-year students of the medical faculties with the English medium of instruction contains the detailed plans of the discipline “The Latin Language and Medical Terminology”, speciality 222 “General Medicine”. The aim of the methodological manual is to assist the teachers with the organization of learning process for the first-year students with the English medium of instruction.

**811.124:[001.4:615](072)**

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## PREFACE

The methodological manual for teachers corresponds to the requirements for the teaching of the Latin language and medical terminology in medical universities, to the typical Latin language syllabus.

The main purpose of the manual is to assist the teachers during the preparation to the practical classes of the Latin language and medical terminology in the groups of the first-year students of the medical faculties with the English medium of instruction, specialty 222 “General Medicine”. The training manual contains 17 developed practical classes, which are held, as a rule, during the 2<sup>nd</sup> semester, is consistent with the Module 2. Pharmaceutical and clinical terminology, and divided into such submodules as:

- Submodule 1. Lexical assurance of theme “The prescription”;
- Submodule 2. The prescription. National pharmacopoeia;
- Submodule 3. Clinical terminology.

The teachers of the Department of Foreign Languages have thoroughly developed the structure of each practical class. The content of the classes, their goals and tasks correspond to the modern requirements of teaching of the discipline “The Latin Language and Medical Terminology”.

The classes provide the development the students’ skills and abilities to know the names of the medical forms, pharmaceuticals and chemical nomenclature, to form the Latin part of the prescription according to the rules, to know the vocabulary and grammatical material for building clinical diagnosis in Latin in the main branches of medicine, to translate the diagnosis into Latin, to emphasise meaningful morphemes in clinical in complex clinical terms. It is highly recommended to have the manual during each class.

The methodological manual is based on the National textbook on the Latin Language and Medical Terminology Basics, edited by L.Yu. Smolska and other references.

## **MODULE II. PHARMACEUTICAL AND CLINICAL TERMINOLOGY**

### **SUBMODULE 1. LEXICAL ASSURANCE OF THEME “THE PRESCRIPTION”**

#### **THEME 1**

**Тема заняття:** The verb. The basic forms of the verb. The Imperative Mood. The Present Indicative Active and Passive. The Present Subjunctive Active and Passive. The verb sum, esse. The verb fio, fieri. - 2 год.

**Методичне забезпечення заняття:**

**Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.

**Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

**Мета заняття:**

**Практична:**

- Сформувати вміння знаходити основу та визначати дієвідміну дієслів;
- Навчити утворювати 3-ю особу однини та множини теперішнього часу;
- Навчити утворювати форми наказового способу дієслів I-IV дієвідміни та вміти використовувати їх у фармацевтичній термінології;
- Навчити утворювати форми дійсного та умовного способу активного та пасивного стану;

- Навчати утворювати та вживати форми дієслова, які застосовують у рецептурі та фармацевтичній термінології;
- Навчати перекладати елементарні речення, вислови та афоризми, що мають деонтологічну та загальноосвітню цінність;
- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хв).

**II. Основна частина:**

1. Пояснення нового матеріалу (70 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (10 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi!* – *Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Non curātur, qui curat.* – Those who are not treated, must be too busy.

*Dictis facta respondeant.* – Practice what you preach.

*Carpe diem, quam minimum credula postero.* – Seize the present; trust tomorrow e'en as little as you may.

*Noli dare verba ventos.* – Deliver your words not by number but by weight.

*Transeat a me calyx iste.* – Let this cup pass from me.

*Nolite mittēre margarītas ante porcos.* – Do not cast pearls before swine.

*Fiat lux!* – Let there be light!

*Sis felix!* – May success attend you!

## **II. Основна частина**

### **1. Пояснення нового матеріалу.**

#### **The Verb**

Latin verbs possess the following properties:

1) **Tense (Tempus)** – there are six tenses in Latin. We shall study only the Present tense (Praesens).

2) **Number (Numērus):**

numērus singulāris – singular;

numērus plurālis – plural.

3) **Person (Persona):**

persōna prima – the 1<sup>st</sup> person;

persōna secunda – the 2<sup>nd</sup> person;

persōna tertia – the 3<sup>rd</sup> person.

4) **Mood (Modus):**

modus indicatīvus – the Indicative Mood; denotes real actions

modus conjunctīvus – the Subjunctive Mood; represents actions that are possible, doubtful, supposed or desired.

modus imperatīvus – the Imperative Mood; denotes a direct order

infinitīvus – the Infinitive.

5) **Voice (Genus):**

genus actīvum – the Active Voice;

genus passīvum – the Passive Voice.

#### **The dictionary verb forms**

Latin verbs are Dispensed in a dictionary in four main forms. We shall study only two main forms, namely:

1. the 1<sup>st</sup> person singular of the Present Indicative Active (praesens indicatīvi actīvi) with the personal ending -o;

2. the indefinite verb form (infinitīvus praesentis actīvi) with the ending -re;

curo, āre – to cure

misceo, ēre – to mix

solvo, ěre – to dissolve

linio, īre – to lubricate

#### **The identification of the verb conjugation and the verb stem**

Latin verbs are divided into four conjugations (conjugation – conjugatio).

Verbs with the stem ending -ā are referred to the I conjugation. Verbs with the stem ending -ē belong to the II conjugation. Verbs with the stem ending in a consonant and in a vowel -ū belong to the III conjugation. Verbs with the ending -ī are referred to the IV conjugation.

The stem of the Present tense (*praesens*) is determined by means of cutting the suffix *-re* in the indefinite verb form for the verbs of the I, II, IV conjugations and the suffix *-ěre* for the III conjugation:

<i>Conjugation</i>	<i>Infinitivus</i>	<i>Praesens stem</i>	<i>Praesens stem ending</i>
I	curāre	curā-	ā
II	miscēre	miscē-	ē
III	solvēre diluěre	solv- dilu-	consonant -ů
IV	linīre	linī-	-ī

**N.B.!** The verb *recipio, ěre – to take* belongs to a small subgroup of the III conjugation verbs where a stem is not determined according to the general rule, but due to the 1<sup>st</sup> person singular, Present Indicative Active. So, the stem is *recipi-*.

### The Imperative mood

The Imperative Present is used in the 2<sup>nd</sup> person (singular and plural). The Imperative Mood for the verbs of the I, II, IV conjugations in the 2<sup>nd</sup> person singular coincides with the verb stem of the Present tense. The Imperative Mood for the verbs of the III conjugation in the 2<sup>nd</sup> person singular is formed by adding the ending *-e* to the verb stem. The 2<sup>nd</sup> person plural of the Imperative Mood of the I, II, IV conjugations is formed adding the ending *-te* to the stem in the Present tense. In the III conjugation the combining vowel *-i* is added between the stem and the ending.

<i>Conjugation</i>	<i>Infinitivus</i>	<i>Praesens stem</i>	<i>Imperativus</i>	
			<i>2<sup>nd</sup> person singular</i>	<i>2<sup>nd</sup> person plural</i>
I	curāre	curā-	Cura! Cure!	Curāte! Cure!
II	miscēre	miscē-	Misce! Mix!	Miscēte! Mix!
III	solvēre diluěre	solv- dilu-	Solve! Dissolve! Dilute!	Solvíte! Dissolve! Diluítě!
IV	linīre	linī-	Lini! Lubricate!	Linítě! Lubricate!

### Negative form of imperative mood

Negation in the indefinite verb form for the 2<sup>nd</sup> person singular is expressed by the word *noli* + *infinitivus*: *Noli nocēre!* (Do not harm!). For the 2<sup>nd</sup> person plural: *nolítē* + *infinitivus*: *Nolítē nocēre!* (Do not harm!).

*In prescriptions verbs are used in the Imperative mood:*

Recípe: – Take:

Sterilísá! – Sterilize!

Misce! – Mix!

Da. – Dispense!

Da tales doses numěro... – Dispense the following doses...

Signa. – Sign. (Denote).

### The present indicative active and passive

Latin verbs can be used in two voices: active and passive. Transitive verbs can be used both in the Active and Passive Voices. Intransitive verbs can only be used in the Active Voice. Transitive verbs require using the Accusative case (Acc.). *The Present Indicative is formed by adding the ending of the Active and Passive Voices to the stem of the Present tense.*

#### Personal endings of the Present Indicative

Person	Active Voice		Passive Voice	
	sing.	plur.	sing.	plur.
1.	-o	-mus	-or	-mur
2.	-s	-tis	-ris	-mini
3.	<b>-t</b>	<b>-nt</b>	<b>-tur</b>	<b>-ntur</b>

In the I, II, IV conjugations personal endings are added directly to the verb stems, but in the verbs belonging to the IV conjugation in the 3<sup>rd</sup> person plural the combining vowel -u is added between a stem and a personal ending: lini-u-nt, lini-u-ntur.

In the III conjugation of the 3rd person singular the personal ending is added to a stem by means of the combining vowel -i. In the 3<sup>rd</sup> person plural the combining vowel -u is added.

**N.B.!** As a rule, personal pronouns in Latin are not used with the verbs.

#### The present indicative active

Infinitive	3 <sup>rd</sup> person singular	3 <sup>rd</sup> person singular
curo, āre	cura-t (he, she, it) treats	cura-nt (they) treat
misceo, ēre	misce-t mixes	misce-nt mix
solvo, ēre	solv-i-t dissolves	solv-u-nt dissolve
diluo, ēre	dilu-i-t dilutes	dilu-u-nt dilute
linio, īre	lini-t lubricates	lini-u-nt lubricate

#### The present indicative passive

Infinitive	3 <sup>rd</sup> person singular	3 <sup>rd</sup> person singular
curo, āre	curā-tur (he, she, it) is treated	cura-ntur (they) are treated
misceo, ēre	miscē-tur is mixed	misce-ntur are mixed
solvo, ēre	solv-ī-tur is dissolved	solv-u-ntur are dissolved
diluo, ēre	dilu-ī-tur is diluted	dilu-u-ntur are diluted
linio, īre	linī-tur is lubricated	lini-u-ntur are lubricated

## The subjunctive mood

The Present Subjunctive is formed by means of replacing the stem ending –a with –e in the verbs of the I conjugation. In the verbs belonging to the II, III, IV conjugations the Present Subjunctive is formed by adding the vowel –a and personal endings to the verb stems.

### Personal endings of the subjunctive mood

Person	Active Voice		Passive Voice	
	sing.	plur.	sing.	plur.
1.	-m	-mus	-r	-mur
2.	-s	-tis	-ris	-mini
3.	<b>-t</b>	<b>-nt</b>	<b>-tur</b>	<b>-ntur</b>

### The present subjunctive active

Infinitive	3 <sup>rd</sup> person singular	3 <sup>rd</sup> person singular
curo, āre	cure-t would cure, let (him, her, it) cure	cure-nt would cure, let (them) cure
misceo, ēre	misce-a-t would mix, let mix	misce-a-nt would mix, let mix
solvo, īre diluo, īre	solv-a-t would dissolve, let dissolve dilu-a-t would dilute, let dilute	sol-a-nt would dissolve, let dissolve dilu-a-nt dilute would dilute, let dilute
linio, īre	lini-a-t would lubricate, let lubricate	lini-a-nt would lubricate, let lubricate

### The present subjunctive passive

Infinitive	3 <sup>rd</sup> person singular	3 <sup>rd</sup> person singular
curo, āre	curē-tur (he, she, it) would be cured, let (him, her, it) be cured	cure-ntur (they) would be cured, let (them) be cured
misceo, ēre	misce-ā-tur would be mixed, let be mixed	misce-ā-ntur would be mixed, let be mixed
solvo, īre diluo, īre	solv-ā-tur would be dissolved, let be dissolved dilu-ā-tur would be diluted, let be	solv-ā-ntur would be dissolved, let be dissolved dilu-ā-ntur would be diluted, let be

	diluted	diluted
linio, īre	lini-ā-tur would be lubricated, let be lubricated	lini-ā-ntur would be lubricated, let be lubricated

The 3<sup>rd</sup> person singular and plural praesens conjunctīvi passivi can be translated in the pharmaceutical terminology as the indefinite verb form, meaning an order, e.g.:

Misceātūr. – Mix.

Detur. – Dispense.

Signētūr. – Sign. (Denote).

Besides the imperative mood, one can use in prescriptions the verb forms of the subjunctive mood, meaning virtually the same:

Misceātūr. Dētūr. Signētūr. – Let be mixed! Let be dispensed! Let be denoted! (Mix! Dispense! Denote!)

Dentur tales doses numēro... – Let the following doses be dispensed! (Dispense such doses!)

Repetātūr! – Let be repeated! Repeat!

Sterilisētūr! – Let be sterilized! Sterilize!

### The verb sum, esse – to be

The present indicative (Praesens indicatīvi)

<i>Singularis</i>	<i>Pluralis</i>
1. sum – I am	sumus – we are
2. es – You are	estis – you are
3. est – he, she, it is	sunt – they are

The verb esse possesses functions of:

simple predicate;

link-verb.

As a simple predicate the verb esse means “to exist, to be”.

For example:

In clinīca oculistae sunt. – There are oculists at the hospital.

The nominative part of the compound predicate is used in the Nominative case:

Medicīna disciplīna antiqua est. – Medicine is an ancient science.

### The verb fio, fiēri – to form, to become

The verb fio, fiēri belongs to the irregular verbs. It possesses the ending of the active voice with the passive meaning. The verb fio, fiēri is conjugated according to the IV conjugation. In prescriptions it is used in the subjunctive mood (the 3<sup>rd</sup> person singular and plural).

<i>Present Indicative (indicativi)</i>		<i>Present Subjunctive (conjunctivi)</i>	
<i>sing.</i>	<i>pl.</i>	<i>sing.</i>	<i>pl.</i>
fit	fiant	fiat	fiant

Prescription expressions:

*Misce, fiat pasta. Mix to form a paste.*

*Misce, fiat unguentum. Mix to make an ointment.*

*Misce, fiat linimentum. Mix to form a liniment.*

*Misce, fiat emulsum. Mix to form an emulsion.*

*Misce, fiat pulvis. Mix to form a powder.*

*Misce, fiant pilulae. Mix to form pills.*

*Misce, fiant species. Mix to form species.*

**N.B.!** Subordinate (complex) sentences with the conjunction “ut” can be used in prescriptions as well. In this case a complex sentence has the following structure:  
*Misce, ut fiat... – Mix to form...*

For example:

*Misce, ut fiat pasta. – Mix to form a paste.*

*Misce, ut fiant species. – Mix to form species.*

*References: Compulsory*

## Practicing.

Reading vocabulary on p. 110. Doing a task on p. 109.

*Read and translate:*

1. Audīte et intellegīte! – Hear and understand!
2. Auscultāre disce! – Listen to learn!
3. Noli nocēre! – Not to harm! (2<sup>nd</sup> person singular)
4. Nolīte nocēre! – Not to harm! (2<sup>nd</sup> person plural)
5. Crystallus solvītur. – A crystal is dissolved.
6. Aegrōtus auscultātur et palpātur. – A sick would be auscultated and palpated.
7. Medīcus bene diagnoscit, bene curat. – A doctor identifies well and well treats.
8. Instrumentum sterilisātur. – An instrument would be sterilized.
9. Mixtūra bis repetītur. – A mixture is repeated twice.
10. Dentur tales doses. – Let the following doses be dispensed.
11. Misce, fiat pasta. – Mix to form a paste.
12. Misceātur. Detur. Signētur. – Mix! Dispense! Denote!

Doing the exercise 1, p. 119. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p.121.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 67-78;
- to do exercises 2-5, 12, 13 in a written form, p. 119-121;
- to memorize words on pp. 110, 117 for a dictation; expressions on p. 118.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 2

**Тема заняття:** The prescription, its structure. The Latin part of the prescription. - 2 год.

### **Методичне забезпечення заняття:**

#### **Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

#### **Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

### **Мета заняття:**

#### **Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Дієслово”;
- Закріпити форму запису та структури латинської частини рецепта;
- Виробити навички оформлення рецепта;
- Вивчити найважливіші рецептурні скорочення;
- Навчити перекладати латинські речення;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хвилин)

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (25-30 хв).
2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Quae medicamenta non sanat, ferrum sanat; quae ferrum non sanat, ignis sanat;*

*quae vero ignis non sanat, insanabilia reputare oportet. (Hippocrates) -* What is not cured with medicines, is cured with iron, what is not cured with iron, is cured with fire, what is not cured with fire, should be considered incurable. (Hippocrates)

*Eruditio aspēra optima est. – Spare the rod and spoil the child.*

*Nihil habeo, nihil curo. – A beggar can never be bankrupt.*

*Altissī ma flumīna minī mo sono labuntur. – Still waters run deep.*

*Usus est unus legum corrector. – Experience is the mother of wisdom.*

*Oratio veritatis simplex est. – The language of truth is simple.*

*Rem verba sequuntur. – Keep to the subject and the words will follow.*

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 67-78;
- checking exercises 2-5, 12, 13, p. 119-121;

- a dictation pp. 110, 117 for a dictation; expressions on p. 118; professional medical expressions p. 42;
- a quiz.

### Variant 1

**1. Identify the stem and conjugation:**

intrāre (to enter); solvēre (to dissolve); venīre (to come)

**2. Form Imperative Present Active of the following verbs:**

agitāre (to shake up); dividēre (to divide); docēre (to teach)

**3. Make the 3<sup>rd</sup> person singular and plural of the Present Indicative Active and the Present Indicative Passive:**

tegēre (to cover); nutrīre (to feed)

**4. Make the 3<sup>rd</sup> person singular and plural of the Subjunctive Active and the Subjunctive Passive:**

habēre (to have); repetēre (to repeat)

**5. Translate the following word combinations:**

a) **into English:** Misce, fiat pasta. Solvātur tabulettā.

b) **into Latin:** Let it be sterilized. Prepare.

### Variant 2

**1. Identify the stem and conjugation:**

sentīre (to feel); adhibēre (to use); tegēre (to cover)

**2. Form Imperative Present Active of the following verbs:**

palpāre (to palpate); studēre (to study); vertēre (to turn)

**3. Make the 3<sup>rd</sup> person singular and plural of the Present Indicative Active and the Present Indicative Passive:**

curāre (to treat, to take care of); finīre (to finish)

**4. Make the 3<sup>rd</sup> person singular and plural of the Subjunctive Active and the Subjunctive Passive:**

miscēre (to mix); solvēre (to dissolve)

**5. Translate the following word combinations:**

a) **into English:** Misceātur! Pilūla solvītur.

b) **into Latin:** Water (aqua, ae f) is used. They study.

### Variant 3

**1. Identify the stem and conjugation:**

addēre (to add); tussīre (to cough); nocēre (to do harm)

**2. Form Imperative Present Active of the following verbs:**

captāre (to catch); vivēre (to live); vidēre (to see)

**3. Make the 3<sup>rd</sup> person singular and plural of the Present Indicative Active and the Present Indicative Passive:**

defendēre (to defend); praeparāre (to prepare)

**4. Make the 3<sup>rd</sup> person singular and plural of the Subjunctive Active and the Subjunctive Passive:**

bibēre (to drink); formāre (to form)

**5. Translate the following word combinations:**

a) **into English:** Formetur pilūla. Massam (massa) vident.

b) **into Latin:** Let them live. Pills (pilūlae) are added.

**2. Explanation of the new material, using the tables on the blackboard.**

### The prescription

Drug prescribing is a part of medical science which deals with the rules of prescribing various forms of medications.

Prescription (from Latin “recipio, recēpi, receptum, ēre” – to take, i.e. “receptum” – taken, received, obtained) is the physician’s written instructions for a pharmacist concerning compounding and dispensing medications with mentioning the route of their administration.

Prescriptions are obligatory written for:

- prescription medications;
- non-prescription medications and medical products in case of free or preferential duty terms dispensing;
- medicines prepared in a pharmacy for a certain patient.

**N.B.! Prescriptions are written on a standard prescription form with an ink or ballpoint pen legibly, accurately, without corrections. With obligatory filling in all columns of a form.**

The prescription consists of the following parts:

<b>I. Inscriptio (Inscriptio prima)</b>	– a seal which establishes the identity of the prescriber: office address and phone number;
<b>II. Datum (Inscriptio secunda)</b>	– the date of the prescription (a pharmacist is unlikely to fill a prescription that is very old);
<b>III. Nomen aegroti</b>	– patient’s name and age (it is particularly necessary to indicate the age when a patient is under 14 or over 60); when a physician prescribes medications

	for himself, instead of writing his name he can put “Pro auctōre” (for the author) or “Pro me” (for me);
<b>IV. Nomen medici</b>	– physician’s name
<b>V. Invocatio</b>	– physician’s order which is Dispensen to a pharmacist and expressed by the word <b>Recipe:</b> ( <b>Rp.:</b> is a short form ). – Take. It is traditional to include the symbol <b>R<sub>x</sub></b> , which is the abbreviation for recipe when the prescription is written in English;
<b>VI. Designatio materiarum</b>	– the constituents of medicine forms, their dosage;
<i>basis seu remedium cardināle</i>	– the main substance intended for the primary therapeutic effect;
<i>remedium adjuvans</i>	– an auxiliary substance, which enhances the effect of the main substance and alleviates its side effects;
<i>remedium corrigens</i>	– a correcting substance (improves taste, odour or, sometimes, colour of medications);
<i>remedium constituens</i>	– a forming substance, which Dispenses solid, soft or liquid form to medications;
<b>VII. Subscriptio</b>	– the prescription directions to the pharmacist: the way of compounding of the medicine, a medicinal form, a number of doses, a packing type. Sometimes the physician uses only the following words: Misce. Da (in a detailed prescription) or Da. (in a shortened prescription);
<b>VIII. Signatura</b>	– directions to be placed on a prescription label to indicate to the patient how to take or use the medication. This part of the prescription begins with the word Signa – sign or Sign. The route and the time of medication administration are Dispensen in a state language or in a language clear for a patient. Abbreviations are not admissible in this part of the prescription. It is also forbidden to write such instruction as “Internal”, “External” etc;
<b>IX. Nomen medici et sigillum personale</b>	– a physician’s signature and a personal seal (stamp).

5, 6 and 7 parts of a prescription are written in Latin. They are called “the Latin part” of a prescription.

A prescription is called **simple** if only one medication is prescribed (formula remediorum simplex). In Subscriptio of a simple prescription a physician writes: **Da. Signa.** Such a prescription contains one medicinal substance with the main therapeutic effect or one medicinal form.

A prescription is called **composite** if two or more medications are prescribed (formula remediorum composita). In Subscriptio of a composite prescription a dosage form is indicated.

*E.g.: Misce, ut fiant suppositoria (Mix to form suppositories).*

In addition to a dosage form the number of doses is indicated in Subscriptio.

*E.g.: Da (Dentur) tales doses numero... in tabulettis (Dispense... such doses in tablets)*

### The rules on writing prescriptions

1. The Latin part of each prescription must start with the verb **Recipe:**. From this verb the question Who? What? is used that requires Accusativus, so the amount of substances is denoted in Acc. sing./ pl. The word gramma, miligrama is not written but implied. The question Who? What? is asked from amount it means that names of substances are written in Gen.sing./pl.

For example:

Recipe: Tincturae Belladonnae 15 ml  
Gen. sing (Who? What?)      Acc. (Who? What?)

2. Nothing is written below the word **Recipe:** since this area is intended for pharmacist's calculations.

3. The name of each ingredient is written in Genetivus and starts with a new line and with an initial capital letter, strictly one under one.

*With an initial capital letter in the middle of the line one writes:*

- names of medicinal substances;
- names of chemical elements;
- names of plants and animals;
- personal names.

*With an initial small letter one writes:*

- parts of herbs (root, fruits, seeds, leaves);
- animal organs (liver, horns)
- the following words: **oxýdum, i n; peroxydum, i n; hydroxydum, i n** in the names of oxides, peroxides, hydroxides;
- names of salt anions;
- adjectives.

For example:

*Recipe: Infusi herbae Adonis vernalis 6,0 – 180 ml*

*Rx: The infusion of the pheasant's eye 6,0 – 180 ml*

4. The quantity of solid and powdery substances is indicated in grams and parts of a gram (e.g., 1,0; 10,0; 100,0; 0,5; 0,01; 0,002). The quantity of liquid substances is indicated in millilitres or grams (e.g., 1 ml, 10 ml, 200 ml) or in drops. Liquid medicinal substances up to 1 ml are usually dosed in drops. A number of drops is marked in Roman figures. The word “gutta” in a prescription is written in the Accusative case: guttam I, guttas X (e.g., gtt.I, gtts. X).

For example:

*Recipe: Olei Menthae piperitae guttas III*

*Rx: 3 drops of peppermint oil*

5. Antibiotics, hormones, some vitamins and other medicines are dosed and dispensed in effect units (UE), serums and vaccines – in antitoxic units (UA) and in international units (IU).

For example:

*Recipe: Penicillini 200 000 IU*

*Rx: Penicillin 200 000 IU*

6. The patented trade names of medicines are written in converted commas and **they are not declined**. Prescriptions for multicomponent medicines that are manufactured under trade names with standard dosages can be written without denoting names of medicine ingredients. It is an abbreviated form of writing. For example:

*Recipe: Tabulettas “Phytoferrolactolum” numero 30*

*Da.*

*Signa. 1 tablet 3 times a day*

7. Prescriptions for medications with one ingredient with denoted dosage can be written either in an abbreviated or complete form.

For example:

**Complete form.**

*Recipe: Sulfadimethoxini 0,5*

*Da tales doses in tabulettis numero 10*

*Signa. Take 1 tablet per 24 hours*

**Abbreviated form.**

*Recipe: Tabulettas Sulfadimethoxini 0,5 numero 10*

*Signa. Take 1 tablet per 24 hours*

8. There is an exception words “tablet”, “tablets”, “suppositories”, “suppository”, “gel”, “gels”. The matter is that they are used only in **Acc. sing.** or **pl.** in prescriptions. For example:

*Recipe: Tabulettam Analgini*

*Da.*

*Signa.*

---

*Recipie: Tabulettas “Ascorutīnum” numēro 30*

*Da.*

*Signa. 1 tablet 3 times a day for a month in ulcerative-necrotic Vensan’s stomatitis*

---

*Recipie: Suppositorium cum Ichtyolo 0,2*

*Da tales doses numēro 10*

*Signa. 1 suppository rectally twice a day*

---

*Recipie: Suppositoria cum Ichtyolo 0,2 numēro 10*

*Da.*

*Signa. 1 suppository rectally twice a day*

---

*Recipie: Gelum “Titriōlum” 25,0*

*Da.*

*Signa. Apply to the skin.*

**N.B.!** The word “dragee” is not declined.

*Recipie: Dragee “Supradin” numēro 30*

*Da.*

*Signa.*

9. If two or more substances are prescribed in equal amounts, their amount is only expressed once, after the last name. Figures are preceded by the adverb “**ana**” (āā – equally).

For instance:

*Rx: Valerian tincture*

*Lily of the valley tincture as much of each 10 ml*

*Mix. Dispense.*

*Sign. 20 -30 drops 2 – 3 times a day*

*Recipie: Tincturae Valerianaē*

*Tincturae Convallariae ana 10ml*

*Misce. Da.*

*Signa. 20 -30 drops 2 – 3 times a day*

10. If a solvent should be added to the substance in required amount to get a volume of a ready medicine, the preposition **ad** (up to) is used.

11. If a physician Dispenses an instruction to a pharmacist to determine amount of a forming substance independently, he or she writes **quantum satis** (as much as required).

If a patient requires an urgent medicine administration (in emergency), a physician writes the following: **Cito! (quickly)**, **Citissime! (as quickly as possible)**

or **Statim!** (**immediately**) at the top part of the prescription. If a patient uses the prescription twice, a physician should write at the top of a prescription: “**Repete bis!**” (Repeat twice!) or “**Bis repetatur!**” (Repeat twice!). Antidotes that are prepared in a pharmacy out of turn are signed – **Antidotum!** (Antidote).

### **Additional expressions used in prescriptions**

Cito! – Quickly!

Statim! – Immediately!

Repete! – Repeat!

Repetatur! – Repeat!

Repete bis! – Repeat twice!

Bis repetatur! – Repeat twice!

Repete ter! – Repeat three times! Thrice!

Ter repetatur! – Repeat three times.

Non repetatur! – Do not repeat!

Pro me! – For me!

seu Pro auctōre! – For the author!

Ad usum proprium. – For own application.

Verte! – Turn over!

12. It is admissible to write out up to three medicines, providing they do not contain potent or narcotic medicines. Prescriptions are separated by means of a **horizontal line**.

Prescriptions that do not meet regulations are considered invalid, therefore, medicines cannot be dispensed due to them. These prescriptions are left in a pharmacy, stamped as “invalid prescription”, recorded in a special register, with further return to the clinical setting, which issued the prescription.

*References: Compulsory*

### **Practicing.**

Reading vocabulary on pp. 144-145. Doing a task on p. 143.

*Read and translate:*

1. In receptis compositis post basim remedium adjūvans sequitur. – In complex prescriptions there is remedium adjuvans after basis.
2. Partes recepti sunt: prima est inscriptio, secunda – nomen et aetas aegrōti, tertia – nomen medīci, quarta – invocatio, quinta – designatio materiārum, sexta – subscriptio, septima – signatūra, octāva – nomen et sigillum medīci proprium. – Parts of a prescription are: the first is the body of prescription, the second – a patient’s name and age, the third – a doctor’s name, the fourth – invocation, the fifth – designatio materiārum, the sixth – subscriptio, the seventh – signatūra, the eighth – a doctor’s signature and a personal name.
3. Pharmacopoea doses maxīmas remediōrum venenōrum et remediōrum

heroicōrum probe notat “pro dosi” et “pro die”. – One marks correctly The maximum pharmacopoeia doses of poison and drastic drugs as “for a day” or “for a dose”.

4. In receptis compositis post verbum contractum “Rp.:” locum primum remedium basis occūpat. – In complex prescriptions after abbreviation of the verb “Rp.:” the first place belongs to the main substance intended for the primary therapeutic effect.

5. Deinde remedium corrīgens addītur, quod sapōrem, odōrem et colōrem medicamenti corrīgit. – After a correcting substance is added that corrects a taste, smell and drug colour.

6. Loco postrēmo remedium constituens stat, quod formam medicamenti constituit. – The last place belongs to a forming substance that constitutes a drug form.

Doing an exercise 1 (from 1 to 5), p. 153. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 155.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 96-99;
- to memorize vocabulary for a dictation pp. 144, 145; expressions p. 148;
- to copy § 99 and make a xerocopy of pp. 149-152;
- to do exercises 1 (prescriptions no. 6,7)-2, pp.154-155.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 3

**Тема заняття:** The Latin chemical nomenclature. The names of chemical elements, acids, oxides, salts, ethers. - 2 год.

### **Методичне забезпечення заняття:**

#### **Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

#### **Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

### **Мета заняття:**

#### **Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Рецепт, його структура. Латинська частина рецепта”;
- Навчити утворювати латинською мовою і писати в рецептах найменування хімічних сполук;
- Навчити перекладати латинські речення;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хвилин)

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (25-30 хв).
2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Medīca mente non medicamentis.* – Cure with wit, not with medications.

*Graviōra quaēdam sunt remēdia pericūlis.* – The remedy is worse than the disease.

*Quod habet, non numērat.* – Health is not valued till sickness comes.

*Stultitia non sanātur.* – He who is born a fool is never cured.

*Fortior est meta medicīnae certa diaeta.* – Diet cures more than the lancet.

*Potius mori quam foedāri.* – A bad wound is cured, not a bad name.

*Cura, ut valeas.* – Look after one's health.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 96-99;
- checking exercises 1 (prescriptions no. 6,7)-2, pp.154-155;
- a dictation pp. 144, 145; expressions p. 148;
- a quiz.

#### Variant 1

**1. Translate into English the following prescription:**

Recipe: Chloroformii

Olei Helianthi ana 20 ml

Misce, fiat linimentum.

Da.

Signa.

*New words: Chloroformium, i n – chloroforme*

*oleum, i n – oil*

*Helianthus, i m – sunflower*

**2. Translate into Latin the following prescription:**

Rx: Oak bark decoction 20,0 – 200 ml (Decoction of bark of oak)

Dispense!

Denote!

*New words: bark – cortex, icis m*

*oak – Quercus, us f*

*decoction – decoctum, i n*

**Variant 2**

**1. Translate into English the following prescription:**

Recipie: Tincturae Valerianae

Tincturae Convallariae ana 10 ml

Solutionis Nitroglycerini 1 % – 1 ml

Misceatur. Detur.

Signetur.

*New words: tinctura, ae f – tincture*

*Valeriana, ae f – valerian (medicinal herb)*

*Convallaria, ae f – lily of valley (medicinal herb)*

*solutio, onis f – solution*

*Nitroglycerinum, i n – nitroglycerine*

**2. Translate into Latin the following prescription:**

Rx: Dibazole 0,005

Sugar 0,3

Mix to form a powder. Dispense such doses in number 12.

Sign.

*New words: Dibazolum, i n – dibazole*

*Saccharum, i n – sugar*

*pulvis, eris m – powder*

### Variant 3

#### 1. Translate into English the following prescription:

Recipē: Mentholi 0,25

Tincturae Eucalypti 50 ml

Spiritus aethylici 90 % – 100 ml

Misce. Da.

Signa.

New words: *tinctura, ae f – tincture*

*Eucalyptus, i f – eucalyptus, blue gum (medicinal plant)*

*Mentholum, i n – menthol*

*spiritus, us m – alcohol, spirit*

*aethylicus, a, um – ethylic*

#### 2. Translate into Latin the following prescription:

Rx: Oil of peppermint (Peppermint oil)

Oil of thyme (thyme oil)

Oil of pine (pine oil) equally 5 ml

Mix. Dispense.

Sign.

New words: *oil – oleum, i n*

*peppermint – Mentha, ae f*

*pine – Pinus, i f*

#### 2. Explanation of the new material, using the tables on the blackboard.

##### The Latin chemical nomenclature

Chemical nomenclature is the system of naming chemical elements (e.g., zinc, sulfur) and compounds (e.g., acids, oxides, salts) which serve as medical substances. In prescriptions one denotes Latin names instead of chemical element symbols or instead of compound formulas.

##### The names of chemical elements

<b>Aluminium, i n</b>	aluminium
<b>Argentum, i n</b>	argentum, silver
<b>Arsenicum, i n</b>	arsenic
<b>Aurum, i n</b>	aurum, gold
<b>Barium, i n</b>	barium
<b>Bismuthum, i n</b>	bismuth

<b>Borum, i n</b>	boron
<b>Bromum, i n</b>	bromine
<b>Calcium, i n</b>	calcium
<b>Carboneum, i n</b>	carbon
<b>Chlorum, i n</b>	chlorine
<b>Cuprum, i n</b>	copper
<b>Ferrum, i n</b>	iron
<b>Iodum, i n</b>	iodine
<b>Hydrargyrum, i n</b>	mercury
<b>Hydrogenum, i n</b>	hydrogen
<b>Kalium, i n</b>	potassium
<b>Lithium, i n</b>	lithium
<b>Magnesium, i n (Magnium)</b>	magnesium
<b>Manganum, i n</b>	manganese
<b>Natrium, i n</b>	sodium
<b>Nitrogenum, i n</b>	nitrogen
<b>Oxygenum, i n</b>	oxygen
<b>Phosphorus, i m</b>	phosphorus
<b>Plumbum, i n</b>	lead
<b>Silicium, i n</b>	silicon
<b>Stibium, i n</b>	surma
<b>Sulfur, ūris n</b>	sulphur
<b>Thallium, i n</b>	thallium
<b>Zincum, i n</b>	zinc

The names of chemical elements are II declination nouns of the neuter gender (Nom. sing. ending -um), e.g., Argentum, i n – silver, Bromum, i n – bromine, Ferrum i n – iron, Iodum i n – iodine, Zincum, i n – zinc.

Exceptions: **Phosphorus, i m – phosphorus**, **Sulfur, ūris n – sulphur**.

### The names of acids

Latin names of acids comprise the noun **acidum, i n** and an adjective. Acids (acida) are classified as oxygen-containing and oxygen-free. The names of *oxygen-containing acids* are formed by adding the suffix -icum, denoting the *higher oxidation degree*, to a stem of the acid-forming element. For instance:

Acidum sulfuricum ( $H_2SO_4$ ) – sulphuric acid;  
Acidum nitricum ( $HNO_3$ ) – nitric acid.

The suffix -ōsum indicates a *lower degree of oxidation*. For example:

Acidum sulfurōsum ( $H_2SO_3$ ) – sulphurous acid;

Acidum nitrōsum ( $HNO_2$ ) – nitrous acid.

If there are more than two oxidation degrees, each of them is expressed by corresponding prefixes and suffixes. For example:

Acidum per-chlor-icum ( $HClO_4$ ) – perchloric acid;

Acidum hypo-chlor-ōsum ( $HClO$ ) – hypochlorous acid.

The names of *oxygen-free acids* are formed by means of the prefix hydro- and the suffix -icum. For example:

Acidum hydro-chlor-icum ( $HCl$ ) – hydrochloric acid

Acidum hydro-sulfur-icum ( $H_2S$ ) – hydrosulphuric acid

Oxides in prescriptions:

*Recipe: Acidi borici*

*Recipe: Acidi hydrochlorici*

### The names of oxides

Oxides (“oxide” is derived from the Greek “oxys” – acid, sour) comprise: oxides, peroxides, hydroxides, suboxides:

oxide – oxýdum, i n

peroxide – peroxydum, i n

hydroxide – hydroxydum, i n

suboxide – oxydulātus, a, um (adjective)

Names of oxides, peroxides, hydroxides contain two nouns:

– cation name (always comes first in Gen. sing.);

– anion name (follows the cation name in Nom. sing.), e.g., Calcii oxýdum – calcium oxide, Hydrogenii peroxydum – hydrogen peroxide, Calcii hydroxydum – calcium hydroxide.

Suboxide is expressed by the adjective **oxydulātus, a, um**, which agrees with the name of the cation, e.g., Nitrogenium oxydulātum – nitrogen suboxide.

Oxides in prescriptions:

*Recipe: Zinci oxýdi*

*Recipe: Hydrogenii peroxydi*

*Recipe: Ferri hydroxydi*

*Recipe: Nitrogenii oxydulāti*

## The names of salts

Salts are classified as oxygen-containing and oxygen-free. The salt name contains a cation name (the most commonly, metal) in Gen. sing., and an anion name (acid residue) in Nom. sing.

The anion name of oxygen-containing acid salts with the highest oxidation degree is expressed by a noun of the 3<sup>rd</sup> declension, which in Nom. sing. ends in -as, and in Gen. sing. has the ending -atis, e.g.:

Natrii sulfas (Nom. sing.) – sodium sulphate;

Natrii sulfātis (Gen. sing.) – sodium sulphate;

Codeini phosphas (Nom. sing.) – codeine phosphate;

Codeini phosphātis (Gen. sing.) – codeine phosphate.

The anion name of oxygen-containing acid salts with a lower oxidation degree is expressed by a noun of the 3<sup>rd</sup> declension, which in Nom. sing. has the ending -is, and in Gen. Sing. ends in -itis, e.g.:

Natrii sulfis (Nom. sing.)

Natrii sulfītis (Gen. sing.)

Salts in prescriptions:

*Recipe: Calcii chloridi*

*Recipe: Kalii tellurītis*

*Recipe: Plumbi acetātis*

A numeral, indicating the number of hydrogen atoms, and the root -hydrogen are added in the names of salts formed by acids with three and more hydrogen atoms, e.g., Natrii Hydrogenphosphas (monohydrogenphosphas) – sodium hydrophosphate – Na<sub>2</sub>HPO<sub>4</sub> or Natrii dihydrogenphosphas – sodium dihydrophosphate – NaH<sub>2</sub>PO<sub>4</sub>.

The names of basic salts are formed from middle salts names by adding the prefix sub- to the anion base, e.g., Bismuthi subnitras – bismuth basic nitrate.

If there are more hydroxyl groups in the basic salt, a numeral, indicating the number of these groups, is added to the salt name, e.g.: Bismuthi (III) dihydroxonitras (Bi(OH)NO<sub>3</sub>) – bismuth dihydroxonitrate (III).

## The names of potassium and sodium organic salts

Latin names of sodium and potassium organic salts comprise two nouns in the Nominative case: the base name and the hyphen-attached word natrium or kalium (the way of writing potassium and sodium with a small letter is the exception to the rule concerning the capitalization of chemical elements names). Initially the anion name is written in a capital letter, followed by the cation name written in a small letter, e.g.: Norsulfazolum-natrium – sodium norsulphazole, Gen. sing. Norsulfazoli-natrii.

Potassium and sodium organic salts in prescriptions:

*Recipe: Norsulfazoli-natrii*

### **The names of hydrocarbon and acid radicals**

Names of hydrocarbon and acid radicals are formed by adding the suffix -yl (from the Greek word “hyle” – substance) and the ending -ium to the hydrocarbon or acid roots, e.g.:

*acetyl – acetylium  
ethyl – aethylium  
methyl – methylium*

### **The names of ethers**

Latin names of ethers comprise two words, like the names of salts, e.g.: Methylii salicýlas – methylsalicylate (methyl ether of salicylic acid), Amylii nitris – amylnitrite (amyl ether of nitrous acid).

Ethers in prescriptions:

*Recipe: Amylii nitrítis*

*References: Compulsory*

### **Practicing.**

Reading vocabulary on pp. 123-124. Doing a task on p. 123.

*Read and translate:*

1. Tabulettae acídi glutaminíci obductae. – Coated tablets of glutaminic acid.
2. Acídum hydrochlorícum dilütum. – Diluted hydrochloric acid.
3. Sulfur depurátum et Sulfur praecipitátum. – Purified sulphur or precipitated sulphur.
4. Unguentum Hydrargýri oxýdi flavum. – Yellow ointment of mercury oxide.
5. Solutio acídi boríci. – Solution of boric acid.
6. Hydrargýrum, seu Hydrargýrum praecipitátum album. – Mercury or white precipitated mercury.
7. Acidum borícum remedium antiseptícum est. – Boric acid is an antiseptic drug.

Doing an exercise 1, p. 129. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 130.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 79-87;
- to memorize vocabulary for a dictation pp. 123, 124; § 82;
- to do exercises 2-6, pp. 154-155.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 4

**Тема заняття:** The Pharmaceutical terminology. Vitamins. Botanic nomenclature. - 2 год.

**Методичне забезпечення заняття:**

**Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

**Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

**Мета заняття:**

**Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Латинська хімічна номенклатура”;

- Навчити розпізнавати та запам'ятувати найменування лікарських засобів для безпомилкового написання;
- Навчити виокремлювати словотворчі елементи у найменуваннях;
- Навчити вірному порядку слів у фармацевтичних термінах;
- Навчити диференціювати вітаміни;
- Навчити відрізняти фармацевтичну назву від ботанічної назви рослин;
- Навчити перекладати латинські речення;
- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хвилин)

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (25-30 хв).
2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi!* – *Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Ex nihilo nihil fit!* – Nothing comes from nothing!

*Sapientia ars vivendi putanda est.* – Wisdom should be considered the art of living.

*Scientia nihil est quam veritatis imago.* – Science is nothing other than the image of truth.

*Sapiens solus beatus est.* – Wisdom is the wealth of the wise.

*Diligentia sine scientia est flamma sine luce.* – Zeal without knowledge is fire without light.

*Litterae thesaurus sunt.* – Science is the salt of life.

**II. Основна частина**

## **1. Homework checking.**

- revision of the material § 79-87;
- checking exercises 2-6, pp.154-155;
- a dictation pp. 123, 124; § 82;
- a quiz.

### **Variant 1**

#### **1. Translate into Latin the following chemical names in nominative and genetive forms singular:**

phosphorous acid, basic magnesium carbonate, potassium, lead plaster (emplastrum, in – plaster), barium oxide, citric acid, sodium chloride.

#### **2. Translate into English the following prescription:**

Recipere: Hydrargyri cyanidi  
Novocaini ana 0,2  
Aqua pro injectionibus 20 ml  
Misceatur. Detur.  
Signetur.

New words: *Novocainum , i n – novocaine*

*aqua, ae f – water*  
*injectio, onis f – injection*

#### **3. Translate into Latin the following prescription:**

Rx: 12 tablets of acetylsalicylic acid 0,25  
Dispense.  
Sign.

### **Variant 2**

#### **1. Translate into Latin the following chemical names in nominative and genetive forms singular:**

iodine solution, silicon, potassium permanganate, sulphur ointment (unguentum, in – ointment), nitrous acid, citric acid, aluminium hydroxide.

#### **2. Translate into English the following prescription:**

Recipere: Ferri reducti 0,5  
Acidi ascorbinici 0,1  
Misce, fiat pulvis  
Da tales doses numero 50 in capsulis.  
Signa.

New words: *reductus , a, um – restored*

*pulvis, eris m – powder*  
*capsula, ae f – capsule*

### **3. Translate into Latin the following prescription:**

Rx: Zinc oxide powder 0,25

Dispense such doses in number 12.

Sign.

*New word: powder – pulvis, eris m*

### **Variant 3**

#### **1. Translate into Latin the following chemical names in nominative and genetive forms singular:**

yellow mercury oxide (flavus, a, um – yellow), copper sulphate, hydrochloric acid, boric acid powder (pulvis, eris m – powder), calcium hydroxide, sodium chloride, basic lead acetate.

#### **2. Translate into English the following prescription:**

Recipie: Tabulettas Oleandomycini phosphatis obductas 0,125 numero 25

Detur.

Signetur.

*New word: obductus, a, um – coated*

#### **3. Translate into Latin the following prescription:**

Rx: Atropine sulfate solution 0,1 % – 1 ml

Dispense such doses in number 12

Sign.

*New word: solution – solution, onis f*

### **2. Explanation of the new material, using the tables on the blackboard.**

#### **The pharmaceutical terminology**

Pharmaceutical terms are predominantly formed by elements of Greek origin, which indicate medicine chemical composition, origin, therapeutic effect, etc.

Pharmaceutical terms are mainly coined by adding several components (roots), by means of the combining vowel -o. For instance, Acidum hydrochloricum – hydrochloric acid (chemical composition is revealed), Chinocidum – (the origin is indicated: quinocide is produced from a quinquina bark), Chologonum – chologon, bile-expelling medication (therapeutic effect is indicated).

Components of complex terms possessing clearly established stable meanings and forming several group terms are known as word-forming elements.

Proper learning of the pharmaceutical terminology requires profound knowledge of etymology and meanings of Latin and Greek word-building elements which clarify and determine meanings of terms.

Word-building elements are simple and complex morphemes in names of medicines which have constant meanings and denote:

- a source of extracting, e.g.: *Mentha* – *Menthōlum* – medicine containing mint;
- chemical composition or route of medicine synthesis, e.g.: *Iodinōlum* – medicine containing chemical element Iodine;
- belonging to certain pharmacological group, e.g.: *Lidocaīnum* – medicine for local anaesthesia;
- anatomic or physiologic actions, e.g.: *gelum “Phleboton”* – gel used for varicose syndrome etc.

If the name of a chemical compound is convenient in usage, it is preserved in the name of the medicinal substance. However, the majority of medicines of chemical origin possesses two namings: systemic and trivial. The systemic name is of scientific character and denotes the chemical structure of a medicinal substance. However, it is not very applicable due to some reasons. Hence, a short trivial name is used, e.g., 1-phenyl -2-3- dimethyl -4-metiaminopyrazolone-5-N-potassium - methylsulfonat – is well-known analgin.

The trivial name is formed mainly by combination of word -forming elements.

If a *trivial* name is latinized, it ends in -um. The following suffixes: -an, -in, -ol, -id are used in forming trivial names, e.g., *Urosulfanum*, *Vasopressinum*, *Tocopherolum*, *Pyocidum*. The majority of Latin medicine names are II declension nouns of the neutral gender. In the chemist's there are medicines with proprietary names which do not have the Latin ending. These *patented* names are written as proprietary ones in the Nominative case, but in prescriptions these names possess the ending of the Genitive case.

Latin names are usually transliterated with dropping the ending -um, e.g.: *Menthōlum* – menthol.

*A teacher and students analyze tables on pp. 133-137. “The names of hydrocarbon and acid radicals”, “The word-forming elements indicating pharmacological groups of medicines”, “The word-forming elements indicating pharmacological effects of medicinal forms”, “The group names of medicines according to their pharmacological effects”.*

**N.B.!** Names of medications indicating their pharmacologic actions are substantivized adjectives of II declension neuter gender which have only **plural form**.

### **The word order in pharmaceutical terms**

In pharmaceutical terms there is the following word order:

a noun is followed by an adjective, e.g.: *Helichrýsum arenarium* – *Helichrysum arenarium*

an attribute, indicating a substance or a herb, is expressed by a noun in Genitīvus singulāris, e.g.: *oleum Anīsi* – *Anise oil*

namings of stone seeds are written in Genetīvus plurālis, e.g.: *Oleum Persicōrum* – *Peach oil*

commercial namings are written in Nominativus with a capital letter in converted comas, e.g.: Tabuletæ “Citramōnum”

**N.B.! Strict words sequence is obligatory in compound pharmaceutical terms:**

firstly – name of medicinal form,

secondly – a noun in Gen. (name of plant, drug, chemical element or substance)

thirdly – adjective agreed with the name of medicinal form

E.g.: *Extractum Rhei siccum* – dry extract of Rhubarb

*Extractum Aloes fluidum* - liquid extract of Aloe

*Linimentum Streptocidi compositum* – composed liniment of *Streptocidum*

### Vitamins\*

The word “vitaminum” was coined in 1911 by the Warsaw-born biochemist Casimir Funk (1884-1967). At the Lister Institute in London, Funk isolated a substance that prevented nerve inflammation (neuritis) in chickens raised on a diet deficient in that substance. He named the substance “vitamine” because he believed it was necessary to life and it was a chemical amine. The “e” at the end was later removed when it was recognized that vitamins need not be amines.

The letters (A, B, C and so on) were assigned to the vitamins in the order of their discovery. The one exception was vitamin K which was assigned its “K” from “Koagulation” by the Danish researcher Henrik Dam.

- *Vitaminum A (Retinoli acetas)*: Retinol. Carotene compounds responsible for transmitting light sensation in the retina of the eye. Deficiency leads to night blindness.
- *Vitaminum B1 (Thiaminum)*: Thiamin, acts as a coenzyme in body metabolism. Deficiency leads to beriberi, a disease of the heart and nervous system.
- *Vitaminum B2 (Riboflavinum)*: Riboflavin, essential for the reactions of coenzymes. Deficiency causes inflammation of the lining of the mouth and skin.
- *Vitaminum B3 (Niacinum)*: Niacin, an essential part of coenzymes of body metabolism. Deficiency causes inflammation of the skin, vagina, rectum and mouth, as well as mental slowing.
- *Vitaminum B5 (acidum pantotenicum)*: Pantothenic acid.
- *Vitaminum B6 (Pyridoxini hydrochloridum)*: Pyridoxine, a cofactor for enzymes. Deficiency leads to inflammation of the skin and mouth, nausea, vomiting, dizziness, weakness and anemia.
- *Vitaminum Bc (acidum folicum)*: Folic acid is an important factor in nucleic acid synthesis (the genetic material). Folate deficiency leads to megaloblastic anemia.

- *Vitaminum B12 (Cyanocobalaminum)*: An essential factor in nucleic acid synthesis (the genetic material of all cells). Deficiency leads to megaloblastic anemia, as can be seen in pernicious anemia.
- *Vitaminum C (acidum ascorbinicum)*: Ascorbic acid, important in the synthesis of collagen, the framework protein for tissues of the body. Deficiency leads to scurvy, characterized by fragile capillaries, poor wound healing, and bone deformity in children.
- *Vitaminum D (Calciferolum)*: A steroid vitamin which promotes absorption and metabolism of calcium and phosphorus. Under normal conditions of sunlight exposure, no dietary supplementation is necessary because sunlight promotes adequate vitamin D synthesis in the skin. Deficiency can lead to osteomalacia in adults and bone deformity (rickets) in children.
  - *Vitaminum D2 (Ergocalciferolum), vitaminum D3 (Cholecalciferolum)*.
  - *Vitaminum E (Tocoferoli acetas)*: Deficiency can lead to anemia.
  - *Vitaminum K (Vikasolum)*: An essential factor in the formation of blood clotting factors. Deficiency can lead to abnormal bleeding.
  - *Vitaminum K3 (Menadionum)*: Menadione
  - *Vitaminum N (natura)*: is essentially a prescription for more time in nature.
  - *Vitaminum P (Rutinum)*: It reduces the permeability and fragility of capillary vessels.
  - *Vitaminum PP (acidum nicotinicum)*: It is involved in many oxidative-reduction reactions, the formation of enzymes and the exchange of lipids and carbohydrates in living cells.

*References:* William C. Shiel Jr. *Medical Definition of Vitamins.* URL: <https://www.medicinenet.com/script/main/art.asp?articlekey=6002>

\* Викладач може подати тільки назви вітамінв без пояснення їх дії.

Vitamins in prescriptions:

*Recipe: Dragee “Undevitum”*

*Recipe: Tabulletas “Pentovitum”*

### **The herb names in Crude Drug Nomenclature**

Herb names used in Pharmacopoeia, pharmacology and prescribing, i.e. in medicinal nomenclature, commonly differ from herb namings from the botanical nomenclature.

In the botanical nomenclature, according to the principles of a Swiss scientist K.Linney, every herb possesses two names:

1. generic (expressed by a noun);
2. specific (most commonly expressed by an adjective, rarely by a noun);

In the botanical terminology the gender name is commonly written with a capital letter and the species name with a small one.

In the pharmaceutical terminology herbs typically possess either a generic or a specific name.

For example:

<i><b>Botanical herb name</b></i>	<i><b>Pharmaceutical herb name</b></i>	<i><b>English herb name</b></i>
Arnica montana	Arnica	Arnica
Betula verrucosa	Betula	Birch
Sambucus nigra	Sambucus	Elder
Urtica dioica	Urtica	Stinging nettle
Achillea millefolium	Millefolium	Yarrow
Artemisia absinthium	Absinthium	Absinth
Artemisia cina	Cina	Levant wormseed
Atrropa belladonna	Belladonna	Deadly nightshade
Matricaria chamomilla	Chamomilla	Chamomilla

However, pharmaceutical herb names may consist of several (mainly two) words like in Botany. For example:

<i><b>Botanical herb name</b></i>	<i><b>Pharmaceutical herb name</b></i>	<i><b>English herb name</b></i>
Rubus idaeus	Rubus idaeus	Raspberry
Mentha piperita	Mentha piperita	Pepper mint
Helichrysum arenarium	Helichrysum arenarium	Dwarf everlast

Sometimes, names of herbs used in Pharmacy differ from botanical herb names. For example:

<i><b>Botanical name</b></i>	<i><b>Pharmaceutical names</b></i>
Cassia angustifolia	Senna
Cinchona succirubra	China

*References: Compulsory*

### **Practicing.**

Reading vocabulary on p. 132. Doing a task on p. 131.

*Read and translate:*

1. In chemia praeparata hormonorum efficiuntur: Adrenocorticotropicum, Oxytocinum, Cortinum, Cortosonum, Synoestrolum et cetēra. – In chemical drugs hormones are produced: Adrenocorticotropin, Oxytocin, Cortin, Cortoson, Synoestrol etc.

2. Praeparata oestrogena synthetica, ut Synoestrolum, Aethinyloestradiolum in medicīna late adhibentur. – Synthetic oestrogenic drugs such as Synoestrol and Aethinyloestradiol are widely used in medicine.

3. Servāte Hydrogenii peroxydum in vitris flavis loco frigido et obscūro. – Keep hydrogen peroxide in a yellow bottle in cold and dark place.

4. Chinīnum, Cinchonīnum, Chinidīnum alcaloīda plantae Cinchōna (China) sunt. - Chinine, Cinchonin, Chinidin are alkaloids of plant quinquina.

Doing an exercise 1, p. 140. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 142.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 88-95;
- to memorize vocabulary for a dictation pp. 132, 138-139; § 95;
- to do exercises 2-7, pp.140-142.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## **SUBMODULE 2. THE PRESCRIPTION. NATIONAL PHARMACOPOEIA**

### **THEME 5**

**Тема заняття: The prescription. The liquid medical forms. - 2 год.**

**Методичне забезпечення заняття:**

**Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

**Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

**Мета заняття:**

**Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Фармацевтична термінологія. Вітаміни. Ботанічні назви рослин”;
- Навчити розрізняти види рідких лікарських форм та їх латинські назви;

- Навчити виписувати рецепти на рідкі лікарські форми розгорнутим та скороченим способом;
- Навчити перекладати латинські речення;
- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хвилин)

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (25-30 хв).

2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Morbi non eloquentia, sed remediis curantur.* – Diseases are cured with medications, not with eloquence.

*Tres faciunt collegium.* – Two heads are better than one.

*Durum est debēre, cui nolis.* – Gratitude is a burden.

*Carum est rarum.* – Rare is precious.

*Melior est invidia, quam misericordia.* – Better be envied than pitied.

*Aurea mediocritas.* – The golden mean.

*Tempōri parce.* – There is no time like the present.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 88-95;
- checking exercises 2-7, pp.140-142;
- a dictation pp. 132, 138-139; § 95;
- a quiz.

### Variant 1

- 1. Translate into English, underline the familiar word-forming elements, and explain them:**

Methicillinum, Phenaminum, Sulfacylum, Phlogistonum.

- 2. Translate into English the following prescription:**

Recīpe: Corticis Quercus 100,0

Detur in charta.

Signetur.

*New word: oak – Quercus, us f*

- 3. Translate into English the following prescription:**

Rx: 20 tablets of “Polyvitaplex”

Dispense.

Sign.

- 4. Write in Latin and find synonymous names of vitamins:**

vitamin B<sub>12</sub>; vitamin PP; vitamin A.

### Variant 2

- 1. Translate into English, underline the familiar word-forming elements, and explain them:**

Monomycinum, Desoxycorticosteronum, Apressinum, Antipyrinum.

- 2. Translate into English the following prescription:**

Recīpe: Foliorum Menthae piperitae 200,0

Da in scatūla.

Signa.

*New words: Mentha piperita – peppermint*

*scatūla, ae f – scatule, little box*

- 3. Translate into Latin the following prescription:**

Rx: Penicillin ointment 2% – 100,0

To dispense.

To sign.

*New word: ointment – unguentum, i n*

- 4. Write in Latin and find synonymous names of vitamins:**

vitamin E; vitamin C, vitamin B<sub>3</sub>.

### Variant 3

- 1. Translate into English, underline the familiar word-forming elements, and explain them:**

Cyclodolum, Euphyllinum, Phosphacolum, Sedanalum .

## **2. Translate into English the following prescription:**

Recipē: Decocti radicis Althaeae 10,0 – 100 ml  
 Da in vitro nigro.  
 Signa.

New words: *Althaea, ae f – marsh mallow*  
*vitrum, i n – glass*  
*niger, gra, grum – black*

## **3. Translate into Latin the following prescription:**

Rx: Furacine solution 0,02% – 1000 ml  
 To dispense.  
 To Sign.

New word: *solution – solutio, onis f*

## **4. Write in Latin and find synonymous names of vitamins:**

vitamin B<sub>6</sub>; vitamin D<sub>3</sub>; vitamin B<sub>c</sub>.

## **2. Explanation of the new material, using the tables on the blackboard.**

### **The liquid medicinal forms**

Liquid medicinal forms comprise:

solutions	solutiōnes (solutio, ūnis f)
solutions for injections	solutiōnes pro injectionībus
infusions	infūsa ( infūsum, i n)
decoctions	decocta (decoctum, i n)
emulsions	emulsa (emulsum, i n)
suspensions	suspensiōnes (suspensio, ūnis f)
mucilages	mucilagiīnes (mucilāgo, īnis f)
mixtures	mixtūrae (mixtūra, ae f)
tinctures	tinctūrae (tinctūra, ae f)
drops	guttae (gutta, ae f)
balsams	balsāma (balsānum, i n)

Liquid medicinal forms are dosed in milliliters, some – in drops, alcohols and tinctures – in grams.

To prescribe liquid medicinal forms in a full form one writes: Misce. Da. Signa. in the Subscriptio part. However, in the prescriptions for emulsions, it is necessary to indicate the name of a medicinal form: Misce, fiat emulsum.

### **Solutions – Solutiōnes (solutio, ūnis f)**

Solution is a liquid preparation that contains one or more chemical substances dissolved, i.e., molecularly dispersed, in a suitable solvent or a mixture of mutually miscible solvents. This medicinal form is intended for external application (pro gargarismātis – for gargle, pro enim ātis seu clism ātis – for oenemas, etc);

for internal use (guttae – drops); and parenthal (other than through the digestive tract) administration.

Distilled water (*aqua purificāta*), alcohol (*spiritus aethylicus*), glycerin (*Glycerīnum*) or oils (*olea*) are commonly used as solvents. Solutions can be classified as: aqueous (*aquōsae*), spirituous (*spirituōsae*), oily (*oleōsae*), or glyceric (*glycerinātae*).

Prescriptions for solutions may be written out both in abbreviated and complete forms.

In the abbreviated form the word “*Recipe*” is followed by: 1) the word *Solutiōnis*; 2) a medicinal substance name, 3) solution concentration and quantity. In a complete form the word “*Recīpe*” is followed by a medicinal substance name and by a solvent name:

***Abbreviated form:***

*Recīpe: Solutiōnis Natrii bromīdi 2% 180 ml*

*Da.*

*Signa. Take 1 tablespoonful thrice daily.*

***Complete form:***

*Recīpe: Natrii bromīdi 3,6*

*Aquae purificātae ad 180 ml*

*Misce. Da.*

*Signa. Take 1 tablespoonful three times daily.*

Solution concentration may be Dispensen both in per cents and relative units (if it concerns large dilutions):

*Recīpe: Solutiōnis Furacilīni 1:5000 500 ml*

*Da.*

*Signa. Bathing of the wounds.*

If the solution has an officinal name, the word “*Recipe*” is directly followed by a medicinal name:

*Recīpe: Solutiōnis Ammonii caustīci 10 ml*

*Da.*

*Signa. Moisten a gauze tampon, Dispense it to an unconscious patient to inhale.*

In abbreviated prescriptions for aqueous solutions intended for internal and external administration the type of solvents is not indicated:

*Recīpe: Solutiōnis Resorcīni 2% 100 ml*

*Da.*

*Signa. Bathing of the wounds.*

If alcohols or oils are used as solvents, the preparation name is followed by the adjectives *spirituosa* or *oleosa* accordingly:

*Recīpe: Solutiōnis Mentholī oleōsae 1% 20 ml*

*Da.*

*Signa. Introduce 2- 3 drops into each nostril twice a day.*

Medicines for injections in ampoules and vials are sterile. Solutions for injections compounded in the chemist's must be sterilized.

Expressions in ampullis, pro injectionibus indicate the sterility of injections. To prescribe non-ampoule s olutions one writes the following orders: Sterilisa! Sterilisētur! (Sterilize! Let it be sterilized!).

*Recipie: Solutiōnis Glucōsi 40 % 20 ml*

*Da tales doses numēro 10 in ampullis.*

*Signa. Introduce 10 ml intravenously.*

---

*Recipie: Solutiōnis Glucōsi 40 % pro injectionibus 10 ml*

*Da.*

*Signa. Take 10 ml intravenously.*

---

*Recipie: Solutiōnis Glucōsi 5% 200 ml*

*Solutiōnis Novocaīni 0,5 % 10 ml*

*Misce. Sterilisa! Da.*

*Signa. Administer intravenously.*

Frequently, solutions for injections are prepared directly before administration (ex tempore). In such cases, medicinal substances for injections are prescribed in ampoules (in ampullis) or in vials:

*Recipie: Vincristīni 0,05*

*Da tales doses numēro 6 in ampullis.*

*Signa. Dissolve the ampoule content in 5 ml of sodium chloride sterile isotonic solution. Administer intravenously weekly.*

If the injection solution contains substances that are easily destroyed by heating, they should be added aseptically during the sterilization of the main solution. In such cases the expression Adde aseptice! (add aseptically) should be mentioned in the prescription:

*Recipie: Novocaīni 1,25*

*Solutiōnis Natrii chlorīdi 0,9 % ad 500 ml*

*Misceātur. Sterilisētur!*

*Adde aseptice!*

*Solutiōnis Adrenalīni hydrochlorīdi 0,1% guttas XXV*

*Da.*

*Signa. For infiltration anaesthesia.*

## **Infusions – Infūsa (infūsum, i n)**

Infusion is the soaking of a solid substance in a solvent, such as water, for the purpose of extracting an active ingredient.

Infusions are aqueous extractions from the medicinal plant material by means of boiling and subsequent infusing powdered leaves, flowers, herbs or dissolving extracts. Infusions are prepared ex tempore.

In prescriptions for infusions and decoctions, the word “Recipē” is followed by the word “Infūsi”; by a total amount of medicinal plant material, and a general amount of the infusion.

*Recipē: Infūsi foliōrum Sennae ex 10,0 : 150ml*

*Da*

*Signa. Take 1 tablespoonful in the morning and at bedtime.*

---

*Recipē: Infūsi foliōrum Uvae ursi 200 ml*

*Da.*

*Signa. Take 1 tablespoonful in the morning and at bedtime.*

The following officinal infusions are available at the chemist's:

Infūsum Valeriānae (Valeriane infusion),

Infūsum Sennae compositum (Complex senna infusion).

## **Decoctions – Decocta (decoctum, i n)**

Decoctions are solutions of the active (soluble) constituents of crude drugs prepared by boiling the drug in water and straining the resulting solution. They are to

be prepared just before using. Prescriptions for decoctions are only written out in an abbreviated form. The name of a crude drug with a general dose and the quantity of decoction follows the word “Decocti”:

*Recipē: Decocti cortīcis Frangūlae ex 10,0 – 200 ml*

*Da.*

*Signa. Take 1 tablespoonful in the morning and at bedtime.*

## **Mixtures – Mixtūrae (mixtūra, ae f)**

Mixtures are aqueous liquids containing insoluble solids in suspension and intended for internal use. In practice all mixtures are to be prepared just before using (ex tempore).

*Recipē: Decocti radīcis Inūlae ex 20,0 - 200 ml*

*Sirūpi Glycyrrhīzae 10 ml*

*Misce. Da.*

*Signa. Take 1 tablespoonfu l three times daily.*

---

*Recipē: Infūsi herbae Adon īdis vernālis ex 6,0 – 180 ml*

*Elixīris pectorālis* 5 ml  
*Liquōris Ammonii anisāti* 4 ml  
*Natrii hydrocarbonātis* 3,0  
*Misce. Da.*  
*Signa.* Take 1 tablespoonful thrice daily.

### **Drops – Guttae (gutta, ae f)**

Drops are various solutions and mixtures dosed in drops. Due to the solvent drops are classified as aqueous, alcoholic, oily.

Nasal, ophthalmic and otic drops are available in single -dose or multi –dose containers supplied with an adequate mouthpiece.

*Recipē:* *Tinctūrae Belladonnae* 20 ml

*Da.*

*Signa.* Take 10 drops three times weekly.

---

*Recipē:* *Benzylpenicillīni-natrii* 100 000 IU

*Solutiōnis Natrii chlorīdi isotonīcae sterilisātæ ad* 5 ml

*Misce. Da.*

*Signa.* Drops for eyes. Take 2 drops six times daily into both eyes.

### **Suspensions – Suspensiōnes (suspsio, ō nis f)**

Suspensions are preparations of finely divided undissolved drugs dispersed in a liquid medium. They are used to provide insoluble drugs in a liquid dosage form.

Suspensions are obtained by mixing undissolved substances with distilled water, oils and glycerin. They are intended ad usum externum, ad usum internum, pro injectionībus. Suspensions are available in single-dose and multi -dose containers. In the signature one should mention: “Shake before using”:

*Recipē:* *Suspensiōnis Nifuroxazidi* 90 ml

*Da.*

*Signa.* Take 1 tablespoonful three times daily. Shake before using.

Magistral suspensions that are prepared on vaseline, oil, and glycerin base (except the distilled water), are only prescribed in the full form.

*Recipē:* *Streptomycīni sulfātis* 100 000 IU

*Olei jecōris Aselli* 20,0

*Misce, fiat suspensio.*

*Da.*

*Signa.* Lubricate wounds. Shake before using.

### **Tinctures – Tinctūrae (tinctūra, ae f)**

Tinctures are alcoholic or hydroalcoholic solutions prepared from vegetable materials or chemical substances. Tinctures may be prepared by one of the several extraction methods or by a dissolution method. All tinctures are

officinal. In prescriptions for tinctures the amount of crude drugs and tincture concentration are not indicated. The word “Recipe” is followed by: 1) medicinal form name, 2) plant name, 3) total quantity of the preparation:

*Recipe: Tinctūrae Valeriānae 30,0*

*Da.*

*Signa. Take 15 drops three times daily.*

If a mixture of several tinctures is prescribed, they are typically taken in equal parts:

*Recipe: Tinctūrae Valeriānae*

*Tinctūrae Convallāriae ana 10 ml*

*Misce. Da.*

*Signa. Take 20 drops twice daily.*

### **Extracts – Extracta (extractum, i n)**

Extracts are concentrated preparations from animal or vegetable drugs obtained by removal of the active constituents with a suitable solvent or solvent mixture, evaporation of all or nearly all the solvent, and the adjustment of the residual mass or powder to prescribed standards. Due to the consistency extracts are classified as: liquid (fluīda), dense (spissa) and dry (sicca). Dense and dry extracts are prescribed and dispensed in powders, tablets and other medicinal forms. Liquid extracts are concentrated preparations of plant crude. All liquid extracts are officinal. They are prescribed, dosed and administered in the same ways as tinctures.

Due to the extracting liquid one distinguishes:

Extracta aquōsa – aqueous extracts;

Extracta spīrituōsa – alcohol extracts;

Extracta oleōsa – oily extracts;

Extracta aetherea – ether extracts.

### **Emulsions – Emulsa (emulsum, i n)**

Emulsions are heterogenous, liquid or semisolid dosage forms containing at least two immiscible liquids or semisolids, one of which is dispersed as small globules throughout the other, usually with the aid of a surfactant. Emulsions can be classified as: emulsa oleōsa – oily emulsions (non-genuine) and emulsa seminalia or emulsa semīnum (seed genuine emulsions).

Emulsions can be administered externally, internally and parentherally.

Emulsions are prescribed both in complete and abbreviated forms:

*Recipe: Olei Ricīni 15 ml*

*Gelatōsae 7,5 ml*

*Aquae purificātae ad 150 ml*

*Misce, fiat emulsum.*

*Da.*

*Signa. Should be taken with tablespoonfuls within 30 minutes.*

*Recipe: Emulsi olei Ricini 150 ml Da.*

*Signa. Should be taken with tablespoonfuls within 30 minutes.*

---

*Recipe: Emulsi olei Ricini ex 15,0-150 ml*

*Da.*

*Signa. Should be taken by tablespoonfuls within 30 minutes.*

---

### **Mucilages – Mucilagīnes (mucilago, īnis f)**

Mucilages are viscous adhesive preparations made by dissolving or suspending exudates from certain trees and shrubs in water (tragacanth mucilage). Mucilages may also be prepared from hydrated synthetic polymers (methylcellulose mucilage). Mucilages are obtained by means of aqueous processing mucous substances of plant origin. Flax seed contains mucous substances.

Mucilages are intended for oral administration, and sometimes for external use.

They serve as remedium corrigens, when irritating substances for mixtures and oenemas are prescribed:

*Recipe: Chlorāli hydrātis 3,0*

*Mucilaginis Amyli 20 ml*

*Aquae purificātae ad 90 ml*

*Misce. Da.*

*Signa. Take a tablespoonful at bedtime.*

*References: Compulsory*

### **Practicing.**

Reading vocabulary on pp. 156-157. Doing a task on p. 156.

*Read and translate:*

1. Sirūpus coquātur leni calōre, per bihorium digerātur, tum refrigerētur et colētur. –Syrup with light colour is prepared, during two hours infused, then cooled and strained.

2. Liquor Ammonii anisātus remedium internum est, in mixtūris praescribitur. – Ammonia drops are used as internal drug – is prescribed in mixtures.

3. Recipe solutiōnem Iodi pro usu interno. – Take a solution of iodine for internal use.

4. Misce aquam Rosārum cum spirītu aethylico. – Mix water of Rose with alcohol.

5. Infūsum radīcis Taraxāci ut remedium amārum et cholagōgum praescribitur. – Infusion of root of dandelion and a bitter and cholagogic drug are prescribed.

Doing an exercise 1 (from 1 to 3), p. 165. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 170.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 100-110;
- to memorize vocabulary for a dictation pp. 156, 157;
- to do exercises 1 (from 4 to 12), 2, 4, pp.165-167, 168-169.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 6

**Тема заняття:** The prescription. The soft medical forms. - 2 год.

**Методичне забезпечення заняття:**

**Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

**Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

**Мета заняття:**

**Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Рецепт. Рідкі лікарські форми”;
- Навчити розрізняти види м'яких лікарських форм та їх латинські назви;
- Навчити виписувати рецепти на м'які лікарські форми розгорнутим та скороченим способом;
- Навчити перекладати латинські речення;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хвилин)

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (25-30 хв).
2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Medice, cura te ipsum.* – Physician, heal ourself!

*Veritas magna est et praevalēbit.* – Truth is mighty, and will prevail.

*Te hominem esse memento.* – Remember that you are but a human being!

*Omnis ars natūrae imitatio est.* – All art is but imitation of nature.

*Amat victoria curam.* – Victory favours those who take pains.

*Audiātur et altera pars.* – The other part should be heard as well.

*Domus propria domus optima.* – East or West – home is best.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 100-110;
- checking exercises 1 (from 4 to 12), 2, 4, pp.165-167, 168-169;
- a dictation pp. 156, 157;
- a quiz.

#### Variant 1

**1. Translate into Latin in nominative and genetive forms:**

oil iodine solution, ethylic alcohol, guttae “Sofradex”.

New word: *alcohol* – *spiritus, us m*

**2. Translate into English the following prescription:**

Recipie: Decocti radicis Althaeae 10,0 – 100 ml  
Da in vitro nigro.  
Signa.

New words: *Althaea, ae f* – marsh mallow

*vitrum, i n* – glass

*niger, gra, grum* – black

**3. Translate into Latin the following prescription:**

Rx: Aluminium hydroxide suspension (Suspension of aluminium hydroxide) 4% – 200 ml  
To dispense.  
To sign.

**Variant 2**

**1. Translate into Latin in nominative and genetive forms:**

liquid extract of passiflora, salicylic acid solution in alcohol, decoction of chamomile flowers.

New words: *passiflora* – *Passiflora, ae f*  
*in alcohol* – *spirituosus, a, um*

**2. Translate into English the following prescription:**

Recipie: Hydrargyri cyanidi  
Novocaini ana 0,2  
Aquae pro injectionibus 20 ml  
Misceatur. Detur.  
Signetur.

**3. Translate into Latin the following prescription:**

Rx: Ether tincture of valerian  
Tincture of lily of valley equal 10 ml  
Dispense.  
Sign.

New words: *ether* – *Aether, eris m*

*lily of valley* – *Convallaria, ae f*

**Variant 3**

**1. Translate into Latin in nominative and genetive forms:**

sodium chloride isotonic solution, infusion of nettle leaves, water of bitter almonds

New words: *nettle* – *Urtica, ae f*

*almond – Amygdala, ae f*

*bitter – amarus, a, um*

## **2. Translate into English the following prescription:**

Recipē: Extracti Aloes fluidi 1 ml

Dentur tales doses numēro 10 in ampullis

Signetur.

## **3. Translate into Latin the following prescription:**

Rx: Codeine phosphate 0,2

Infusion of adonis herb from 6,0 – 180ml

Sodium bromide 6,0

Mix. Dispense.

Sign.

*New words: adonis – Adonis, idis m*

## **2. Explanation of the new material, using the tables on the blackboard.**

### **The soft medicinal forms**

*Soft medicinal forms comprise:*

Gels gela (gelum, i n)

Ointments unguenta (unguentum, i n)

Pastes pastae (pasta, ae f)

Liniments linimenta (linimentum, i n)

Plasters emplastra (emplastrum, i n)

### **Gels – gela (gelum, i n)**

Gels are soft medicinal forms for topical administration. Gels contain one or more substances and auxiliary substances, forming the base.

Gels are applied to skin, wounds, ulcers, and some mucous membranes.

Due to the base, gels are subdivided into: hydrophobic (oleogel, hydrophobic solvent – vaseline, vaseline oil, paraffin, gel-forming substance, etc); hydrophilic (hydrogel – water, hydrophilic or non-watery solvent and hydrophilic gel-forming substance).

According to the route of administration gels are subdivided into: 1) gels for external use; 2) gels for oral administration (the most commonly used in paediatric practice); 3) nasal gels; 4) ophthalmic gels; 5) otic (auricular) gels; 6) rectal gels; 7) vaginal gels; 8) cervical gels; 9) urethral gels; 10) dental gels (for gum application, etc).

*Recipe: Gelumi “Titriōlum” 25,0*

*Da.*

*Signa. Apply to the skin.*

## Ointments – (unguentum, i n)

Ointments are medicated semisolid preparations for external application to the skin or mucous membranes. Ointments may contain one or more active substances and auxiliary substances, forming simple or complex base. Ointment usually has a greasy base. Due to the base, ointments are classified as **hydrophobic** (Vaseline, Vaseline oil, Paraffin base, etc), **hydrophilic** (water-soluble base).

Due to the application, ointments are subdivided as: nasal, aural, rectal, vaginal, inhaling, ophthalmic.

Inhaling ointments comprise medicinal form-making substance called the ointment base, which may be:

- Vaseline (Vaselīnum);
- Lanoline (Lanolīnum);
- purified porcine fat (Adeps suillus depurātus, seu Axungia porcīna purificāta);
- officinal glycerine ointment (unguentum Glycerīni );
- officinal naphthalanic ointment (unguentum Naphthalāni);
- officinal spermacetic ointment (unguentum Cetacei).

Ointments are subdivided into officinal and magistral. Magistral ointments may be prescribed in abbreviated and complete forms. The word Recipe is followed by: the name of medicinal form; Unguenti in the Genitive case; the medication name; its concentration and general quantity of the ointment. In complete prescriptions the ointment base name must be followed by the preposition ad with indicating the total quantity of medication.

Officinal ointments are only prescribed in an abbreviated form. The ointment name and its total amount should be indicated in prescriptions.

### ***Abbreviated prescription:***

*Recipe: Unguenti Prednisolōni 0,5% – 20,0*

*Da.*

*Signa. Apply to the affected skin areas.*

### ***Complete prescription:***

*Recipe: Prednisolōni 0,1*

*Vaselīni ad 20,0*

*Misce, fiat unguentum.*

*Da.*

*Signa. Apply to the affected skin areas.*

### ***Prescription for an officinal ointment:***

*Recipe: Unguenti Hydrargyri oxýdi flavi 10,0*

*Da.*

*Signa. Apply to the affected skin areas.*

Officinal ointments comprise: zinc ointment (unguentum Zinci), yellow mercury ointment (unguentum Hydrargyri flavum), white mercury ointment (unguentum Hydrargyri album), glycerine ointment (unguentum Glycerīni),

naphthalanic ointment (unguentum Naphthalāni), xerophorm ointment (unguentum Xeroformii).

### **Pastes – Pastae (pasta, ae f)**

Pastes are stiff-drying ointment - like preparations for external application.

Pastes are ointment modifications, containing 25 % to 65 % (dental pastes up to 75 %) powdery substances.

Paste bases are identical to ointment bases: Vaseline, Lanolin, Adeps suillus depuratus, unguentum Naphthalāni, unguentum Glycerīni, unguentum Cetacei.

The following substances are used as fillers: talc (Talcum), white clay (Bolus alba), wheat starch (Amylum Tritici), maize starch (Amylum Maýdis), potato starch (Amylum Soláni), rice starch (Amylum Orýzae), lycopodium (Lycopodium).

Pastes are only prescribed in a complete form, with mentioning all constituents, their amounts, and the order to the pharmacist: “Misce, fiat pasta” (M., f. pasta). If the ointment content is included in Pharmacopoeia, the paste is prescribed in an abbreviated form:

*Recipe: Anaethesīi 5,0*

*Menthōli 0,5*

*Talci 12,5*

*Vaselīni ad 50,0*

*Misce, fiat pasta*

*Da.*

*Signa. Apply to the affected skin areas.*

Officinal pastes are prescribed in an abbreviated form:

*Recipe: Pastae antiseptīcae biologīcae 10, 0*

*Da.*

*Signa. Apply to gums at bedtime.*

### **Liniments – Linimenta (linimentum, i n)**

Liniments are fluid preparations for application to the skin by friction.

Liniment contains one or more active substances and auxiliary substances, forming the base.

Form-building substances used in liniment production are plant and mineral oils – oleum Lini (linseed or flaxseed oil), oleum Hyoscyāmi (Hyoscyamus oil), oleum Olivārum (olive oil), oleum Amygdalārum (Almond oil), oleum Helianthi (Sunflower oil), oleum Persicōrum (Peach-kerned or Peach oil), oleum Vaselinei (Vaseline oil), oleum Ricīni (Ricin oil), Pix liquida (tar), Ichthyōlum (ichthylol or ichthammol) and others. Liniments are prescribed in a full form:

*Recipe: Menthōli 2,0*

*Olei Helianthi ad 50,0*

*Misce, fiat linimentum.*

*Da.*

*Signa. Rub (massage) the affected joints.*

Officinal liniments, approved by the State Pharmacopeia, are prescribed in an abbreviated form:

*Recipē: Linimenti Synthomycīni 10% -25,0*

*Da.*

*Signa. Apply to the wound margins.*

### ***Officinal liniments:***

Linimentum Aloës - Aloe liniment

Linimentum balsamicum Wishnewsky - Vyshnevsky Balsamic Liniment

Linimentum "Sanitas" - liniment "Sanitas"

Linimentum Streptocidi 5% - Streptocide liniment

Linimentum "Alorom" - liniment "Alorom"

Linimentum "Capsici camphorātum" - pepper-camphoric liniment

### ***Plasters – Emplastra (emplastrum, i n)***

Plasters are paste-like mixtures which can be spread over the skin and which are adhesive at body temperature. Plasters may be protectant, counterirritant. Besides medicinal plants, plasters contain resins, caoutchouc or (India rubber), fats, waxes, salts of fatty acids, vaseline, paraffin, which after melting easily mix with medicinal plants.

Prescriptions for plasters are only written out in an abbreviated form:

- the quantity of the preparation is indicated in grams, and therefore, the medicinal naming is written in Gen. sing.;
- sizes of the material onto which the plaster is spread is indicated; and the name of the medicinal form is written in Acc. sing.

*Recipē: Emplastri Plumbi simplicis 50,0*

*Da.*

*Signa. Slightly warm up, spread upon the flexible material,  
apply to the affected skin.*

*Recipē: Emplastri adhaesīvi bactericīdi 8 cm \* 12 cm*

*Da.*

*Signa. Fix the wound margins.*

Due to the adhesion degree plasters are subdivided into: ***solid (emplasta dura)*** and ***liquid (emplastrum fluida)***.

References: Compulsory

### **Practicing.**

Reading vocabulary on p. 171. Doing a task on p. 171.

*Read and translate:*

1. Recipē Olei Cacao quantum satis, ut fiat suppositorium rectāle. – Take cacao oil as much as required to form rectal suppository.

2. Oblātae facile et cito parantur. – Cachets are prepared easily and quickly.
3. Suspensio Benzylī benzoātis 20% contra scabiem adhibētur. – Suspension of benzyl benzoate 20% is used for scabies.
4. Oleum Cacao remedium constituens suppositoriōrum et globulōrum est. Cacao oil is a forming substance of suppositories and globules.
5. Sapo vir̄idis in compositiōnem unguenti Wilkinsoni adhibētur. – Green soap is used in composition of Wilkinson's ointment.

Doing an exercise 1 (from 1 to 4), p. 176. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 179.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 111-116;
- to memorize vocabulary for a dictation pp. 171, 172, 175;
- to do exercises 1 (from 5 to 6)-4, pp.176-177.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 7

**Тема заняття:** The prescription. The solid medical forms. - 2 год.

**Методичне забезпечення заняття:**

**Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

**Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

**Мета заняття:**

**Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Рецепт. М’які лікарські форми”;
- Навчити розрізняти види твердих лікарських форм та їх латинські назви;
- Навчити виписувати рецепти на тверді лікарські форми розгорнутим та скороченим способом;
- Навчити перекладати латинські речення;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хвилин)

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (25-30 хв).
2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Per scientiam ad salūtem aegrōti.* – To heal the sick through knowledge.

*Similis simili gaudet.* – Like begets like.

*Mutātis mutandis.* – Make changes if it is necessary.

*Est modus in rebus.* – The great thing is moderation.

*Sine prece, sine pretio, sine pocūlo.* – Honesty is the best policy.

*Nemo prophēta acceptus est in patria.* – No prophet is accepted in his own country.

*Species dec̄pit.* – Appearances are deceptive.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 111-116;
- checking exercises 1 (from 5 to 6)-4, pp.176-177;
- a dictation pp. pp. 171, 172, 175;
- a quiz.

### Variant 1

**1. Translate into Latin in nominative and genetive forms:**

ophthalmic ointment of prednisolone, composite plaster of lead, linimentum balsamicum Wishnewsky.

*New word: composite – compositus, a, um*

**2. Translate into English the following prescription:**

Recipie: Dermatoli

Methylii salicylatis

Olei Lini ana 15,0

Misce, fiat linimentum. Da.

Signa.

*New word: Linum, i n – flax*

**3. Translate into Latin the following prescription:**

Rx: Geli “Titriolum” 25,0

To dispense.

To sign.

### Variant 2

**1. Translate into Latin in nominative and genetive forms:**

Paste of zinc, the purest oil of vaseline, ointment “Cremgen”.

*New word: the purest – purissimus, a, um*

**2. Translate into English the following prescription:**

Recipie: Emplastri Plumbi simplicis 50,0

Detur.

Signetur.

**3. Translate into Latin the following prescription:**

Rx: Salicilic acid

Zinc oxide 12,0

Vaseline up to 50,0

Mix to form a paste.

Dispense.

Sign.

### Variant 3

**1. Translate into Latin in Nominative and Genetive forms:**

synthomycine liniment, balsamum “Gold Star”, plaster of pepper Capsicum.

*New word: pepper capsicum – Capsicum, i n*

**2. Translate into English the following prescription:**

Recipie: Unguenti Hydrargyri oxydi flavi 10,0

Detur in vitro fusco.

Signetur.

New words: *vitrum, i n – glass*

*fucus, a, um – dark*

### 3. Translate into Latin the following prescription:

Rx: Composite liniment of streptocide 50,0

Dispense.

Sign.

New word: *composite – compositus, a, um*

### 2. Explanation of the new material, using the tables on the blackboard.

#### The solid medicinal forms

*Solid medicinal forms comprise:*

Powders	pulveres (pulvis, ēris m)
Capsules	capsulae (capsūla, ae f)
Tablets	tabulettæ (tabulettæ, ae f)
Dragee	dragee (dragee, n is not declined)
Suppositories	suppositoria (suppositorium, i n)
Herbal blends	species ( species, erum f (pl))

#### Powders – Pulvēres (pulvis, ēris m)

Powders are solid medicinal forms containing dry, powdery, and finely divided substances, intended for internal and external administration.

Due to the route of administration there are powders for internal application (ad usum internum) and for external administration (ad usum externum). According to the degree of powdering there are the finest-grained (*subtilissimi*), fine-grained (*subtiles*) and coarse-grained (*grossi*) powders. The finest powders are typically designed for internal administration. Fine powders are commonly used for internal administration.

Due to the quantity of substances powders are subdivided into simple (pulvēres simplices), comprising one substance, and compound (pulvēres compositi), comprising more than two substances.

Powders, divided into separate doses, are termed as divided or dosed (pulvēres divisi). They are commonly used for internal administration. Non-divided or non-dosed (pulvēres indivisi) powders, prescribed from 5 to 100,0 and more, are dosed by patients themselves under physician's instructions. They are commonly intended for external administration. In prescribing simple powders the word *Recipe* is followed by: the substance name in the Genitive case, and the substance quantity, without mentioning the name of medicinal form:

*Recipe: Anaesthesīni subtilissimi 50,0*

*Da.*

*Signa. Powder wounded surface.*

In prescriptions for dosed powder, one indicates medicinal substance, its singular dose and number of powders:

*Rec̄ipe: Pancreatīni 0,5*

*Da tales doses num̄ero 24*

*Signa. 1 powder three times daily, on an empty stomach.*

Powders, containing volatile and hydroscopic powders, are dispensed in a waxed paper package (*charta cerāta*) or in a paraffined paper package (*charta paraffinata*):

*Rec̄ipe: Camphorae tritae 0,2*

*Da tales doses num̄ero 12 in charta cerāta.*

*Signa. 1 powder three times daily.*

In prescriptions for compound non-dosed powders one denotes all components and their quantities followed by “*Misce, ut fiat pulvis*”:

*Rec̄ipe: Natrii hydrocarbonātis 20,0*

*Natrii chlorīdi 10,0*

*Misce, fiat pulvis.*

*Da.*

*Signa. Dissolve one tablespoonful of powder in a glass of warm water.*

In prescriptions for compound dosed powders one denotes the quantity of powder substances and the total number of doses:

*Rec̄ipe: Platyclyllīni hydrotartrātis 0,005*

*Dibazōli 0,02*

*Sacchāri 0,3*

*Misce, fiat pulvis*

*Da tales doses numero 12*

*Signa. 1 powder twice daily.*

Compound powders are only prescribed in a full form. Prescribing powders of plant origin begins with the word “*Pulvēris*”, followed by indication of the herb part, its name and dosage:

*Rec̄ipe: Pulvēris foliōrum Digitālis 0,05*

*Da tales doses numero 12.*

*Signa. 1 powder three times daily.*

### **Capsules – Capsūlae (capsūla, ae f)**

Capsules are dosage forms made of hard or soft gelatin, and containing a unit dose of a drug formulation. Capsules can be made of starch or wheat flour (*capsūlae amylaceae seu oblātae*), animal glue gelatin (*capsūlae gelatinōsae*), keratine or glutole (*capsūlae glutoidāles seu gellodurātae*). They contain medicinal substances with disagreeable taste, smell, with a destructing impact on teeth, or with irritating effect. Gelatinous capsules are available in solid forms (*capsūlae gelatinōsae durae*), elastic forms (*capsūlae gelatinōsae molles seu elastīcae*), or they may be capped (*capsūlae gelatinōsae operculātae*). Typically,

capsules are administered orally. Capsules also come in a vaginal or rectal form. In prescriptions for capsules, one should indicate the type of capsules:

*Recipe: Olei jecoris Aselli 1,0*

*Da tales doses numero 30 in capsulis gelatinosis elasticis.*

*Signa. Take 3 capsules three times daily.*

---

*Recipe.: Platiphyllini hydrotartratis 0,005*

*Papaverini hydrochloridi 0,02*

*Misce, fiat pulvis.*

*Da tales doses numero 12 in oblati.*

*Signa. Take 1 capsule three times daily.*

In pharmacological practice there are also: capsulae forte – capsules-forte, depot capsulae – depo- capsules, capsulae retard – retard -capsules.

### **Tablets – Tabulettae (tabuletta, ae f)**

Tablets are solid medicinal forms for internal use (ad usum internum) and for external use (ad usum externum) after previous dissolving (tabulettae solubiles). Tablets for sublingual use are called tabulettae sublinguales; implant tablets (for subcutaneous use) are termed tabulettae implantantae seu implantabulettae; vaginal tablets are entitled tabulettae vaginales. Dissolving tablets are termed solublettae. In the third edition of International Pharmacopoeia, tablets are called compressi.

Prescriptions for tablets can be complete and abbreviated:

#### **Abbreviated:**

*Recipe: Tabulettas Analgini 0,5 numero 10*

*Da tales doses numero 10*

*Signa. 1 tablet for headache*

#### **Complete:**

*Recipe: Analgini 0,5*

*Da tales doses numero 10 in tabulettis*

*Signa. 1 tablet for headache.*

Composite tablets are prescribed in a complete form:

*Recipe: Codeini*

*Natrii hydrocarbonatis*

*Terpini hydratis aā 0,25*

*Da tales doses numero 6 in tabulettis*

*Signa. Take 1 tablet twice daily.*

Composite tablets with a special commercial name are only prescribed in an abbreviated form:

*Recipe: Tabulettas "Macropen" 0,4*

*Da tales doses numero 16.*

*Signa. Take 1 tablets three times daily.*

---

*Recipe: Tabulettas "Coldrex" numero 12*

*Da.*

*Signa. Take 1 tablet three times daily.*

---

*Recipe: Tabulettas "Lipocerebrīn" 0,15 obductas numēro 20*

*Detur.*

*Signētur. Take 1 tablet three times daily.*

---

*Recipe: Tabulettas contra tussim numēro 20*

*Da.*

*Signa. Take 1 tablet three times daily.*

New medicinal forms comprise: retard compressi – retard -tablets (tablets of a prolonged effect), film compressi – filmed -tablets (tablets covered with indissoluble membrane with an opening) and depot compressi – depot tablets.

*Recipe: Tabulettas Nitro-Mac retard 0,25*

*Da tales doses numēro 50.*

*Signa.*

---

*Recipe: Tabulettas Cinnarizīni forte 25*

*Da tales doses numēro 50.*

*Signa.*

### **Dragee – (Dragee)**

Dragee is a sugar-coated solid dosage form for internal use made by recovering granules with medicinal and auxiliary (alkal, chocolate, sugar, etc.) substances. Dragee are prescribed in complete and abbreviated forms:

*Recipe: Dragee Diazolīni 0,005 numēro 20*

*Da.*

*Signa.*

### **Suppositories – Suppositoria (suppositorium, i n)**

Suppository is a solid dosage form that is prepared in various weights and shapes suitable for insertion into a body cavity (usually rectum or vagina), where it melts, dissolves, or disintegrates to produce a desired medicinal effect. Suppositories are classified as rectal (suppositoria rectalia), vaginal (suppositoria vaginalia) and sticks (bacilli). As remedium constituents one applies:

- Theobroma oil (oleum Cacao)
- Butyryl (butyrōlum) – hydrogenized fat of various chemical composition)
- Gelatinous mass (massa gelatinōsa) – mixture of gelatin, glycerine and water
- Synthetic basis (polyenthyleneoxydum)

Rectal suppositories are coned or cylindrical with a rounded tip. Vaginal suppositories are available in globules (globuli), egg-like ovuli – ovuli or as

flat bodies with rounded end (pessaries – pessaria). Little sticks introduced into the uterus are called uretoria.

Magistral suppositories, made in the chemist's, are prescribed in complete and abbreviated forms.

**Complete prescription:**

*Recipē: Dimedrōli 0,01*

*Olei Cacao 3,0*

*Misce, fiat suppositorium rectāle.*

*Da tales doses numero 12.*

*Signa. Insert 1 suppository into the rectum at bedtime, previously removing the covering.*

**Abbreviated prescription:**

*Recipē: Suppositoria cum Dimedrōlo 0,01*

*Da tales doses numero 12*

*Signa. Insert 1 suppository into the rectum at bedtime, previously removing the covering.*

Some complex officinal suppositories possess commercial names, e.g., "Anusolum", "Bethiolum", "Viburcolum", "Osarbonum", "Candibene". In prescriptions, medicinal form names are written in the Accusative case, plural, followed by the suppository name and its number. If the suppository name is written in converted comas, it should be used in the Nominative case, singular. If the name is without converted comas, it is written in Genitive case, singular.

*Recipē: Suppositoria "Anisōlum" numero 10*

*Da.*

*Signa. Apply 1 suppository into the rectum twice a day, previously removing the covering.*

---

*Recipē: Suppositoria "Flurenizidum" 0,1 numero 10*

*Da.*

*Signa. Apply 1 suppository vaginally at bedtime, previously removing the covering.*

---

*Recipē: Suppositoria "Apilācum" 0,005 numero 12*

*Da.*

*Signa. Apply 1 suppository into the rectum three times daily, previously removing the covering.*

**Herbal blends – Species, ērum f (pl)**

Herbal blend is a medicinal form consisting of coarse herb powder (flowers, leaves, roots). Herbal blends are available for internal use as infusions or decoctions: (ad infūsa seu decocta), species fumāles (herbal blends for smoking), herbal blends for gargling (ad gargarismāta), mixtures for cataplasms (ad cataplasmāta) or for baths (pro balneis). In prescriptions for this medicinal form both the route of administration and the mode of medicine preparation are denoted.

Herbal blends can be dosed and non-dosed. Dosed mixtures are prescribed commonly if plant raw material contains potent substances. Each constituent with indicated amount is Dispensen in a prescription, followed by “Misce, fiant species” and by the amount of doses and signature.

*Recipiē: Herbae Adonidis vernalis 2,0*

*Rhizomatis cum radicibus Valeriānae 1,5*

*Misce, fiant species.*

*Da tales doses numero 10.*

*Signa. Boil a package in one glass of water and infuse for 30 minutes.*

Non-dosed herb mixtures are written out in the following way:

*Recipiē: Florum Chamomillae*

*Herbae Hyperici ana 25,0*

*Misce, fiant species.*

*Da.*

*Signa. Boil 1 tablespoonful of the blend in a glass of boiling water, filter, drink 1 tablespoonful four-five times daily.*

Officinal herb mixtures are written out in an abbreviated form:

*Recipiē: Speciērum pectorali um 50,0*

*Da.*

*Signa. Pour a glass of boiling water on 1 tablespoonful of the blend, boil for 10 minutes, take 1/2 of it in the morning and in the evening.*

*References: Compulsory*

## **Practicing.**

Reading vocabulary on pp. 180-181. Doing a task on p. 180.

*Read and translate:*

1. Pulvēres in partes aequāles dividāntur. – Powders are divided into equal parts.

2. Genēra amylōrum quattuor sunt: amȳlum Solāni, amȳlum Tritīci, amȳlum Maȳdis, amȳlum Oryzae. – There are four kinds of starch: popato starch, wheat starch, maize starch and rice starch.

3. Carbo activātus formā tabulettārum etiam “Carbolēnum” nominātur. – Form of tablets of activated carbon is also named “Carbolēnum”.

4. Species sedatīvae e rhizomāte cum radicibus Valeriānae, foliis Menthae piperītae et Trifolii fibrīni, strobīlis Humūli lupūli constant. – Sedative herbal blend consists of root and rhizome of valerian, leaves of pepper mint and trefoil, cone of hop.

5. Capsūlae gelatinōsae elastīcae, durae et operculātae sunt. – Gelatinous capsules are elastic, solid and capped.

Doing an exercise 1 (from 1 to 4), p. 189. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 193.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 117-123;
- to memorize vocabulary for a dictation pp. 180, 181, 188;
- to do exercises 1 (from 5 to 8)-4, pp.189-192.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## **SUBMODULE 3. CLINICAL TERMINOLOGY**

### **THEME 8**

**Тема заняття:** Practical skills. Quiz “Pharmaceutical Terminology”. The introduction of clinical terminology. The notion of clinical term. The Greek and Latin doublets of the 1<sup>st</sup> declension of nouns. - 2 год.

**Методичне забезпечення заняття:**

**Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

**Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

**Мета заняття:**

**Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Рецепт. Тверді лікарські форми”;

- Визначити за допомогою самостійної роботи рівень засвоєння теоретичного матеріалу з теми “Фармацевтична термінологія”;
- Навчити розуміти та утворювати клінічні терміни, що містять терміноелементи І відміни;
- Навчити розрізняти греко-латинські дублети І відміни;
- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (5 хвилин)

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання, написання підсумкової самостійної роботи з теми “Фармацевтична термінологія” (35 хв).
2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi!* – *Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Extrē mis malis, extrēma remedia.* – Desperate diseases must have desperate remedies.

*Medīcus curat, nat ūra sanat.* – The doctor heals, nature convalesces.

*Cui dolet, memīnit.* – We forget our pleasures, we remember our sufferings.

*Volens-nolens.* – Willi-nilli.

*Certa amittī mus, dum inserta petīmus.* – Catch a shadow and let go a substance.

*Id summa miseria est.* – It is the last straw that breaks the camel's back.

*Per aspēra ad astra.* – By steep and toilsome ways to the stars.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 117-123;

- checking exercises 1 (from 5 to 8)-4, pp.189-192;
- a quiz (за бажанням викладача та якщо дозволяє час);

### Variant 1

**1. Translate into Latin in nominative and genetive forms:**

composite powder of sweet root, bitter herbal blend, coated tablets “Allochol”.

*New word: sweet root – Glycyrrhiza, ae f*

**2. Translate into English the following prescription:**

Recipē: Platyphyllini hydrotatratis 0,005

Dibazoli 0,02

Sacchari 0,3

Misce, fiat pulvis. Da tales doses numēro 12.

Signa.

*New word: saccharum, i n – sugar*

**3. Translate into Latin the following prescription:**

Rx: Dragee “Undevit” N 50

To dispense.

To sign.

### Variant 2

**1. Translate into Latin in Nominative and Genetive forms:**

diuretic herbal blend, suppositories “Anuzol”, tablet of phenazepam .

**2. Translate into English the following prescription:**

Recipē: Tabulettas Tetracyclini hydrochloridi cum Nystatino 0,05 numēro 20

Detur.

Signetur.

**3. Translate into Latin the following prescription:**

Rx: Currants fruits

Nettle leaves equally 50,0

Mix to form herbal blend

Dispense.

Sign.

*New words: currant – Ribes, is n*

*nettle – Urtica, ae f*

### Variant 3

#### **1. Translate into Latin in Nominative and Genitive forms:**

chamomile flowers, coated tablet of pancreatin 8000, pectoral herbal blend.

New words: *chamomile – Chamomilla, ae f*

#### **2. Translate into English the following prescription:**

Recīpe: Speciērum antiasthmaticārum 100,0

Detur in sacculo chartaceo.

Signetur.

New words: *sacculus, i n – sac*

*chartaceus, a, um – paper (adj.)*

#### **3. Translate into Latin the following prescription:**

Rx: Calcium carbonate 0,05

Calcium glycerophosphate 0,02

Mix to form a powder.

Dispense such doses in number 12.

Sign.

– practical skills. Quiz “Pharmaceutical Terminology”.

Зразки завдань наведено у Додатках. (See *Appendix I.*)

#### **2. Explanation of the new material, using the tables on the blackboard.**

##### **The introduction to clinical terminology.**

##### **The Greek and Latin doublets of the 1<sup>st</sup> declension nouns.**

##### **The endings as word-forming elements of the 1<sup>st</sup> declension**

The modern scientific terminology, and particularly, its medical subdivision, reflects centuries-old history of medicine. Medical scientific subsystem appears to be the most unified one. This phenomenon can be accounted for the tradition to use unexhaustible sources of classical languages: both ancient Greek and Latin in the process of term formation.

It is estimated that about three-fourths of our medical terminology is of Greek origin. The first reason for this is that the Greeks were the founders of rational medicine in the golden age of Greek civilization in the 5<sup>th</sup> century B.C. A second reason for the large number of Greek medical terms is that the Greek language lends itself easily to the building of compounds. When new terms were needed, with the rapid expansion of medical science during the last century, Greek words or Latin words with Greek endings were used to express the new ideas, conditions, or instruments. The new words follow the older models so closely that it is fairly difficult to distinguish the two by their forms. Such recent words as appendicitis, creatinine, cystoscope, epinephrine, streptococcus, and many others do not appear

different from the classical terms. The fact is that about one-half of our medical terminology is less than a century old. A third reason for using the classical roots is that they form an international language, easily understood by anyone familiar with the subject matter.

Greek medicine migrated to Rome at an early age, and many Latin terms crept into its terminology. Latin was the language of science up to the beginning of the 18<sup>th</sup> century, so practically all medical terms were written in Latin. Due to the influence of the great anatomical work of Andreas Vesalius, *De humani corporis fabrica* (1543), the terminology of anatomy is almost exclusively Latin. The Greek terms came into the English language through Latin. In adapting the Greek words the Romans used the Latin alphabet.

### The structure of one-world clinical terms

Clinical terms are different in their structure. Among them there are one-word clinical terms – nouns of Greek origin or of Latin origin as well as hybrid nouns with Latin and Greek word-forming elements (prefixes, suffixes, roots, stems).

So, such terms can be divided into:

- **simple non-derivates**, e.g.: cancer, cri m; ulcus, ēris n;
- **simple derivates** (formed by affixes joined to the stem), e.g.: hyposalivatio, ὄνις f; fractūra, ae f;
- **compound terms – composites** formed by combining of two or more terminological elements (TE), e.g.: hemicranias, andrologia;

TE may be in **pre-position** (at the beginning of the term – initial TE), **inter-position** (in the middle of the term) and post-position (at the end of the term – final TE).

An initial TE is connected with linking –o– when a next TE starts with a **consonant**: dermat+o+logia (science about skin).

An initial TE not connected with linking –o– when a next TE starts with a **vowel**: gastr+ectomia (stomach excision).

An example of a word with three of the above parts is the medical term **pericarditis**, which means *inflammation of the outer layer of the heart*.

Pericarditis can be divided into three parts:

- **peri - card - itis**

Once divided into its essential parts, pericarditis can be translated:

- the prefix **peri-** translates to *surrounding*,
- the root **–card-** translates to *heart*, and
- the suffix **–itis** translates to *inflammation*.

### Two- and multi-word clinical terms

Multi-word clinical terms consist of two or more words. The main word is Noun (Nom.sing./pl.) and always first. According to the rules is followed by a modifier – either non-agreed or agreed.

Type of a modifier	Term structure		Example
agreed	Noun (Nom.sing./pl.) + Adjective/ Participle (Nom.sing./pl.)		fractura complicata
non-agreed	Noun (Nom.sing./pl.) + Noun (Gen.sing./pl.)		emphysema pulmonum
mixed	Noun (Nom.sing./pl.) + Noun (Gen.sing./pl.)	Adjective/Participle (Nom.sing./pl.)	inflammatio bronchorum acuta
		Adjective/Participle (Gen.sing./pl.)	inflammatio bronchi dextri

### The Greek and Latin doublets of the I<sup>st</sup> declension nouns

Latin noun	Greek noun	Greek word-forming element	Meaning
aqua, ae f	hýdor	hydr-	water
anīma, ae f	psyché	psych-	psyche, soul
causa, ae f	aetía	aeti-	cause
cellūla, ae f	cýtos	cyt-	cell
femīna, ae f	gyné, gynaecós	gynaec-	woman, female
gingīva, ae f	úlon	ul- ( <i>gingiv-</i> is also possible)	gums
glandūla, ae f	adén, adénos	aden-	gland
hernia, ae f	céle	-cele	hernia
lacrīma, ae f	dácryon	dacry-	tear
lingua, ae f	glóssa	gloss-	tongue
mamma, ae f	mastós	mast-	mammary gland
maxilla, ae f	gnáthos	gnath-	maxilla
medulla, ae f	myelós	myel-	marrow, medulla
natūra, ae f	phýsis	physi-	nature
palpebra, ae f	blépharon	blephar-	eyelid
planta, ae f	phýton	phyt-	plant
urīna, ae f	úron	ur-	urine
salīva, ae f	síalon, ptyálon	sial- ptyal-	saliva
tuba uterīna	sálpinx,	salping-	ovarian duct,

	sálpingos		salpinx, uterine tube
vagīna, ae f	cólpos	colp-	vagina
vena, ae f	phleps, phlebós	phleb-	vein
vertebra, ae f	spónylos	spondyl-	vertebra
vesīca, ae f	cýstis	cyst-	bladder, cyst, vasica
vesīca urinaria	cýstis	cyst-	urinary bladder
vesīca biliāris (fellea)	cholecýstis	cholecyst-	gallbladder
vita, ae f	bíos	bio-	life

### The endings as word-forming elements (I declension)

Ending	Meaning
-aemia	blood condition
-algia	pain (without organic changes)
-odynia	pain, ache
-algesia	pain, excessive sensitivity
-ectasia	dilation of tubular or hollow organ, widening
-ectomia	removal, excision, resection
-ergia	activity of an organism
-genia	refers to chin or lower jaw
-graphia	process of recording
-logia	science
-opsia (-opia)	vision, visual examination, microscopic study
-pathia	disease
-plegia	paralysis, apoplexy, stroke
-phobia	fear, morbid fear
-rrhagia	anormal or excessive flow
-rrraphia	suturing or operative repair
-rrhoea	secretion, excretion of fluid
-scopia	examination (instrumental)
-stomia	drawing out an artificial orifice, fistula
-therapia	treatment, mode of treatment
-iatria	treatment of a disease
-tomia	incision, cut, surgery
-uria	presence of urine
-pepsia	pertaining to digestion

-chylia	pertaining to gastric juice
-acusia	hearing
-kinesia	motion, movement, mobility
-orexia	hunger
-osmia	scent, olfaction
-sphygmia	pulse
-geusia	taste
-malacia	softening, mollification
-penia	lack, deficiency, deficit
-philia	disposition, inclination, propensity
-trophia	nourishment, nutrition
-derma (dermia)	disease of the skin
-metria	measuring, measurement, measure
-pexia	attachment, fastening

## N.B.!

1. Terminoelement **-scopia** denotes “methods of internal examination with the help of special instruments”.

*E. g.: endoscopia – examination of the inner layers of the internal tubular organs with the help of endoscopes.*

2. Greek stem **-stoma** (opening) occurs as:

a/ –stoma – fistule made by surgeon (the result of surgical operation)

b/ –anastomosis – artificial conjunction between hollow organs, vessels, cavities of the human body.

*E. g.: gastrostoma, gastroduodenostomia.*

3. Both Greek TE **-ectasia** (pathological process of the organ distension, e.g. gastrectasia – distension of the stomach) and Latin term **dilatatio, ὅνις f** are used in clinical terminology (dilatation ventriculi – distension of the stomach). Dilatatio can also be in post-position, e.g.: vasodilatatio – vessel distention.

4. TE **-iatria** has the meaning “conervative therapy”, e.g.: paediatrics, geriatrics etc.

5. TE **-therapia** is used both in the names of specific therapy methods, e.g.: balneotherapy – bath therapy, and as a separate term with a meaning “non-surgical or conservative treatment”, e.g.: therapia intensive – intensive therapy.

6. The names of some therapy methods are formed using TE **-páthia**, e.g.: homeopathy.

7. TE **-genia** should be distinguished from homonym TE with the meaning “created by something”, e.g.: iatrogenia – pathological condition of patient caused by the careless actions of medical personnel.

*References: Compulsory*

## **Practicing.**

Doing an exercise 1 (the 1<sup>st</sup> column), p. 202. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 204.

## **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 124, 125, 128;
- to memorize Greek and Latin doublets for a dictation § 125, 128;
- to do exercises 1 (the second column), 2, 5, pp. 202-204.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 9

**Тема заняття:** The Greek and Latin doublets of the 2<sup>nd</sup> declension of nouns.  
The most commonly used Greek prefixes. - 2 год.

### **Методичне забезпечення заняття:**

#### **Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

#### **Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

### **Мета заняття:**

#### **Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Вступ до клінічної термінології. Греко-латинські дублети І відміни. Кінцеві терміноелементи І відміни”;
- Навчити розуміти та утворювати клінічні терміни, що містять терміноелементи ІІ відміни;

- Навчити розрізняти греко-латинські дублети II відміни;
- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хв).

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (20-30 хв).
2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Miscēre utile dulci.* – To combine business with pleasure.

*Verba movent, exempla trahunt.* – Words encourage, examples captivate.

*Ignorantia non est argumentum.* – Ignorance is not an argument.

*Ubi Concordia, ibi victoria.* – Victory is there, where consent is.

*Comple aegrotum bona spe.* – Dispense the patient hope for the best.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 124, 125, 128;
- checking exercises 1 (the second column), 2, 5, pp. 202-204;
- a dictation § 125, 128;
- a quiz.

#### Variant 1

**1. Make up the Greek clinical terms with the given meaning:**

disease of mammary gland, pain of gums, graphy of ovarian duct.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

hormonotherapy, gynaecologia, cholecystectomy.

**3. Translate clinical diagnoses:**

- a) **into English:** coma haemolyticum
- b) **into Latin:** acute parodontosis (acute – acutus, a, um)

**4. Translate into Latin the following prescription:**

Rx: Currants fruits

Nettle leaves equally 50,0  
Mix to form herbal blend  
Dispense.  
Sign.

New words: *currant* – *Ribes*, *is n*

*nettle* – *Urtica*, *ae f*

**Variant 2**

**1. Make up the Greek clinical terms with the given meaning:**

morbid fear of water, abnormal secretion of tears, drawing out an artificial fistule on urinary bladder.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

colpopexia, psychologia, phytotherapia.

**3. Translate clinical diagnoses:**

- a) **into English:** emphysema pulmonum
- b) **into Latin:** cyst of the pancreas (cyst – cysta, ae f)

**4. Translate into Latin the following prescription:**

Rx: Calcium carbonate 0,05

Calcium glycerophosphate 0,02  
Mix to form a powder. Dispense such doses in number 12.  
Sign.

**Variant 3**

**1. Make up the Greek clinical terms with the given meaning:**

suturing of gallbladder, excision of mammary gland, examination of vagina .

**2. Translate clinical terms, determine the meaning of word-forming elements:**

hydraemia, glossoplegia, phlebectasia

**3. Translate clinical diagnoses:**

- a) **into English:** extirpation uteri supravaginalis
- b) **into Latin:** fibrosis of the lungs

**4. Translate into Latin the following prescription:**

Rx: Composite liniment of streptocide 50,0

Dispense.

Sign.

## 2. Explanation of the new material, using the tables on the blackboard.

### The Greek and Latin doublets of nouns (masculine gender, II declension)

<i>Latin noun</i>	<i>Greek noun</i>	<i>Greek word-forming element</i>	<i>Meaning</i>
calcūlus, i m	líthos	lith-	calculus, concrement
cancer, cri m	carcínos	carcin-	cancer
digītus, i m	dáctylos	dactyl-	finger
locus, i m	tópos	top-	place, site
medīcus, i m	iatrós, iatér	iatr-	physician, doctor
morbus, i m	nosós	nos-	disease, ailment, illness
muscūlus, i m	mys, myós	my-	muscle
nasus, i m	rhis, rhinós	rhin-	nose
nervus, i m	néuron	neur-	nerve
oculūs, i m	ophthalmós	ophthalm-	eye
pilus, i m	thrix, trichós	trich-	hair
somnus, i m	hýpnos	hypn-	dream, sleep
succus, i m	chylós	chyl-	juice
umbilīcus, i m	omphalós	omphal-	umbilicus navel
utērus, i m	hystéra métra	hyster- metr-	uterus
vir, viri m	anér, andrós	andr-	man, male

### Greek-Latin Doublets of the Neuter Nouns of the II Declination

<i>Latin noun</i>	<i>Greek noun</i>	<i>Greek word-forming element</i>	<i>Meaning</i>
caecum, i n	typhlon	typhl-	caecum
cerēbrum, i n	encéphalon	encephal-	brain

crassum, i n	colon	<b>col-</b>	colon
concrementum, i n	líthos	<b>lith-</b>	calculus, concrement
intestīnum, i n	énteron	<b>enter-</b>	intestine
labium, i n	chéilos	<b>cheil-</b>	lip
ligamentum, i n	sýndesmosis	<b>syndesm-</b>	ligament
medicamentum, i n	phármaco	<b>pharmac-</b>	drugs
mentum, i n	genion	<b>geni-</b>	chin
ovarium, i n	oóphoron	<b>oophor-</b>	ovary
ovum, i n	oon	<b>oo-</b>	ovum, egg
palātum, i n	uranos	<b>uran- (palat- is also used)</b>	palate
rectum, i n	próctos	<b>proct-</b>	rectum
scutum, i n	thyreós	<b>thyreo-, thyro-</b>	shield
venēnum, i n	tóxon, toxicón	<b>toxic-, tox-</b>	poison

### The endings as word-forming elements (II declension)

Ending	Meaning
<b>-cytus</b>	cell
<b>-līthus</b>	calculus, concrement
<b>-logus</b>	specialist
<b>-mētrum</b>	device for measuring certain indicators
<b>-tropus</b>	direction of an action
<b>-blastus</b>	embryo
<b>-iater</b>	physician
<b>-spasmus</b>	spasm

### N.B.!

1. The names of clinicians are formed not only by TE **-logus**, but **-iater** (is always related with the names of corresponding branches of clinical medicine), e.g.: paediatr, tri m – pediatrician; **-ista**, e.g.: oculista, ae m – ophthalmologist; **-pathus**, e.g.: osteopáthus, i m – a specialist on treatment of bone diseases.
2. Final TE **-līthus** indicates localization of concrement, e.g.: nephrolíthus – concrement in a kidney.

## The most commonly used Greek prefixes

<b>A- /an-/</b>	– without / <i>amnesia</i> – loss of memory/
<b>Dys-</b>	– abnormal / <i>dystopia</i> – malposition/
<b>Eu-</b>	– normal / <i>eupnoe</i> – normal breathing/
<b>Ana-</b>	– up / <i>anacrota</i> – the opening of semilunar valves and moving of blood in aorta /
<b>Cata-</b>	– down / <i>catacrota</i> – end of ventricular systole, the pressure in ventricle start to decrease/
<b>Poly-</b>	– many / <i>polydipsia</i> – excessive thirst/
<b>Peri-</b>	– around / <i>pericardium</i> – heart bag/
<b>Para-</b>	– near / <i>parametrium</i> – cellular layer near uterus/
<b>Endo- /en-/</b>	– inside / <i>endocardium</i> /
<b>Epi-</b>	– above / <i>epicardium</i> /
<b>Exo- /ecto-/</b>	– outside / <i>exophthalmus</i> – protruding eye/
<b>Prae-</b>	– before / <i>praesenilis</i> – before senility/
<b>Meta- /met-/</b>	– behind, moving from one state to another / <i>metastasis</i> – pathogenic agent's spread from an initial or primary site to a different or secondary site within the host's body /
<b>Hypo-</b>	– less than normal / <i>hypotonia</i> – decreased muscle tone/
<b>Hyper-</b>	– more than normal / <i>hypertonia</i> – increased tightness of muscle tone /
<b>Dia-</b>	– over, across / <i>diametrum</i> - that is wanting to the measure /
<b>Anti-</b>	– against / <i>vaccinum antipestosum</i> – vaccin against plague/
<b>Sym- /syn-/</b>	– together / <i>symbiosis</i> - any of several living arrangements between members of two different species/

**N.B.!** Remember the following noun suffixes as compared with English:

<b>Prefix (including ending)</b>	<b>Meaning</b>	<b>Example</b>
-ītis, itīdis f	Inflammation (disease of inflammatory nature)	dermatītis – inflammation of the skin; angītis – inflammation of vessels
-ōsis, is f	uninflammatory chronic diseases, numerous formations, abnormal condition	dermatōsis – skin disease leucocytōsis – excess of leucocytes in the blood

	caused by lack or increase of the certain elements	
-iāsis, is f	uninflammatory diseases, signs of diseases	nephrolithiāsis – presence of renal calculi distichiāsis – presence of a double row of eyelashes on an eyelid
-ēma, ātis n	rashes, oedemas, abscesses	empyēma, ātis n – accumulation of pus in the cavity
-ōma, ātis n	tumour (the presence of neoplasm in certain tissues or organs)	dermatōma, ātis n – skin tumour, myoma, ātis n – muscle tumour
-ismus, i m	painful condition, congenital or acquired pathology, deviation	alcoholismus, i m – chronic alcoholism iodismus, i m – poisoning with iodine

*References: Compulsory*

### **Practicing.**

Doing an exercise 1 (the 1<sup>st</sup> column), p. 202. A teacher controls the reading and corrects the answers.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 126, 127, 129;
- to copy § 130;
- to memorize Greek and Latin doublets for a dictation § 126, 127, 129;
- to do exercises 3-4 pp. 203-204.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 10

**Тема заняття: The Greek and Latin doublets of the 1<sup>st</sup> and the 2<sup>nd</sup> declension of adjectives. - 2 год.**

### **Методичне забезпечення заняття:**

#### **Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

#### **Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

### **Мета заняття:**

#### **Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Греко-латинські дублети II відміни”;
- Навчити утворювати клінічні терміни;
- Навчити розрізняти греко-латинські дублети прикметників I групи;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хв).

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (20-30 хв).

2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Tempora mutantur et nos mutamur in illis.* – Times change, and we change with them.

*Sic itur ad astra.* – Thus do we reach the stars.

*Pro patria et libertate.* – For Country and Liberty.

*Non progrēdi est regredī.* – There is no standing still.

*Scio me nihil scire.* – I know that I know nothing.

*Praemonitus, praemunitus.* – Forewarned is forearmed.

*Facile dictu, difficile factu.* – Easier said than done.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 125, 128;
- checking exercises 1 (the second column), 2, 5, pp. 202-204;
- a dictation § 125, 128
- a quiz.

### **Variant 1**

**1. Make up the Greek clinical terms with the given meaning:**

incision of uterus, disease of nerve, pain of ovary.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

androphobia, atrichia, nosologia.

**3. Translate clinical diagnoses:**

a) **into English:** angioma arteriovenosum

b) **into Latin:** pyloantral resection of stomach (stomach – gaster, tris f)

**4. Translate into Latin the following prescription:**

Rx: Tincture of peony 200 ml

Dispense.

Sign.

New word: *peony* – *Paeonia, ae f*

### **Variant 2**

**1. Make up the Greek clinical terms with the given meaning:**

without pulse, abnormal digestion, treatment with sleep.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

ophthalmologia, polydactylia, encephalopathia.

**3. Translate clinical diagnoses:**

a) **into English:** cheilitis superfisialis

b) **into Latin:** cavernous tuberculosis of the lungs

**4. Translate into Latin the following prescription:**

Rx: Mercury cyanide

Novocaine equally 0,2

Water for injections 20 ml

To mix. To sterilize. To dispense.

To sign.

### **Variant 3**

**1. Make up the Greek clinical terms with the given meaning:**

science of poisons, absence of hunger, softening of brain.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

urolithus, colporrhagia, syndesmologia.

**3. Translate clinical diagnoses:**

a) **into English:** icterus physiologicus neonatorum (icterus, i m – jaundice, neonatus, i m – newborn)

b) **into Latin:** hemorrhagic vasculitis

#### 4. Translate into Latin the following prescription:

Rx: Solution of camphor oil 12 ml

Dispense 10 doses in ampules.

Sign.

*New word: camphor – Casmphora, ae f*

#### 2. Explanation of the new material, using the tables on the blackboard.

##### The Greek and Latin doublets of adjectives (I-II declensions)

<i>Latin noun</i>	<i>Greek noun</i>	<i>Greek word-forming element</i>	<i>Meaning</i>
acidus, a, um,	oxýs	<b>ox-</b> , <b>oxy-</b>	acid, sour
albus, a, um	leucós	<b>leuc-</b> , <b>leuk-</b>	white
aliēnus, a, um	xénos	<b>xen-</b>	alien
angustus, a, um	sténos	<b>sten-</b>	narrow
caecus, a, um	typhlós	<b>typhl-</b>	blind
crassus, a, um	pachýs	<b>pachy-</b>	fat, thick
flavus, a, um	xanthós	<b>xanth-</b>	yellow
durus, a, um	sclerós	<b>scler-</b>	hard, solid
griseus, a, um	poliós	<b>polio-</b>	gray
humidus, a, um	hygrós	<b>hygr-</b>	humid, moist
latus, a, um	platýs	<b>platy-</b>	wide
longus, a, um	dolichós	<b>dolich-</b>	long
magnus, a, um	macrós, mégas, megále	<b>macr-</b> <b>mega-</b>	big
malus, a, um	cacós	<b>cac-</b>	bad
medius, a, um	mésos	<b>mes-</b>	middle
mortuus, a, um	necrós	<b>necr-</b>	dead
multus, a, um	polýs	<b>poly-</b>	numerous
niger, gra, grum	mélas, mélanos	<b>melan-</b>	black
novus, a, um	néos	<b>neo-</b>	new
parvus, a, um	micros, olígos	<b>micr-</b> <b>olig-</b>	insufficient
pius, a, um	leptós	<b>lept-</b>	gentle thin
rectus, a, um	proctós,	<b>proct-</b>	straight

	<b>orthós</b>	<b>orth-</b>	right
ruber, bra, brum	erythrós	<b>erythr-</b>	red
siccus, a, um	xerós-	<b>xer-</b>	dry
spurius, a, um	pseudés	<b>pseud-</b>	imaginary
tardus, a, um	bradýs	<b>brady-</b>	slow
totus, a, um	pás	<b>pan-</b>	whole

### The adjectives of the I-II declensions used in clinical terminology

sub(acūtus), a, um	(sub)cutaneous
benignus, a, um	benign
chronīcus, a, um	chronic
contagiōsus, a, um	contagious
hereditarius, a, um	hereditary
infectiōsus, a, um	infectious
(im)plenus , a, um	(un)completed
paralyticus, a, um	paralytic
diabetīcus, a, um	diabetic
toxicus, a, um	toxic
spontaneus, a, um	spontaneous
malignus, a, um	malignant
lymphatīcus, a, um	lymphatic
trigemīnus, a, um	threefold, triple
rheumaticus, a, um	rheumatic
acūtus, a, um	acute
myopathīcus, a, um	myopathic
calculōsus, a, um	calculous
disseminātus, a, um	disseminated
aseptīcus, a, um	aseptic
cardiologīcus, a, um	cardiac, cardiologic
clausus, a, um	close
allergīcus, a, um	allergic
alimentarius, a, um	alimentary
insulinīcus, a, um	insulinic
spasticus, a, um	spastic
congenītus, a, um	congenital , inborn
decompensātus, a, um	decompensated
gangraenōsus, a, um	gangrenous
purulentus, a, um	purulent
ulcerōsus, a, um	ulcerative
trophicus, a, um	trophic
siccus, a, um	dry
tuberculōsus, a, um	tuberculous

arteriovenōsus, a, um	arteriovenous
diffusus, a, um	diffusive, diffuse
humidus, a, um	humid
haemorrhagīcus, a, um	haemorrhagic
hypertrophīcus, a, um	hypertrophic

*References: Compulsory*

### **Practicing.**

Doing an exercise 1 (the 1<sup>st</sup> column), p. 208. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 210.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 131-133;
- to memorize Greek and Latin doublets for a dictation § 131-133;
- to do exercises 1 (the second column), 2, 3A, pp. 208-209.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 11

**Тема заняття:** The Greek and Latin doublets of the 3<sup>rd</sup> declension of nouns.  
**Masculine and feminine.** - 2 год.

### **Методичне забезпечення заняття:**

#### **Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

#### **Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

### **Мета заняття:**

#### **Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Греко-латинські дублети прикметників І групи”;
- Навчити утворювати клінічні терміни;
- Навчити розрізняти греко-латинські дублети іменників III відміни;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хв).

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (20-30 хв).

2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi!* – *Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Non omnia possumus omnes.* – We can't all do everything.

*Nocet empta dolore voluptas.* – Believe me, for I experienced. (Virgil)

*Dixi et animam levavi.* – He gave a piece of his mind and unburdened his heart.

*Hom īnes non sunt similes.* – It takes all sorts to make a world.

*Necessītas atrium mater.* – Necessity is the mother of invention.

*Ne malōrum meminēris!* – Bear no ill will!

*Felix, qui sua sorte contentus est.* – He is happy who thanks himself so.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 131-133;
- checking exercises 1 (the second column), 2, 3A, pp. 208-209;
- a dictation § 131-133;
- a quiz.

#### Variant 1

**1. Make up the Greek clinical terms with the given meaning:**

inflammation of rectum, morbid fear of red, dry eye.

**2. Translate clinical terms, determine the meaning of word-forming elements:**  
hypertrophia, neophopia, platyspondylia.

**3. Translate clinical diagnoses:**

a) **into English:** trauma cerebri

b) **into Latin:** posttraumatic cyst of talocrural joint (cyst – cysta, ae f)

**4. Translate into Latin the following prescription:**

Rx: Tincture of the lily of valley 200 ml

Dispense.

Sign.

*New word: lily of valley – Convallaria, ae f*

### Variant 2

**1. Make up the Greek clinical terms with the given meaning:**

red vision, inflammation of dura mater encephali, examination of uterus.

**2. Translate clinical terms, determine the meaning of word-forming elements:**  
hypnotherapia, polyuria, xerocheilia.

**3. Translate clinical diagnoses:**

a) **into English:** ulcus aquisitum cruris sinistri (ulcus, eris n – ulcer)

b) **into Latin:** diabetic coma

**4. Translate into Latin the following prescription:**

Rx: Reduced iron 1,0

To dispense 15 such doses in gelatinous capsules.

To sign.

### Variant 3

**1. Make up the Greek clinical terms with the given meaning:**

science of muscles, absence of hunger, softening of brain.

**2. Translate clinical terms, determine the meaning of word-forming elements:**  
micrognathia, oxygenotherapy, leukaemia.

**3. Translate clinical diagnoses:**

a) **into English:** rhinitis atrophica anterior

b) **into Latin:** acute bacterial pericarditis

**4. Translate into Latin the following prescription:**

Rx: Tablets of furacine for external use 0,5 in number 10

Dispense.

Sign.

## 2. Explanation of the new material, using the tables on the blackboard.

### The Greek and Latin doublets of nouns (masculine gender, III declension)

<i>Latin noun</i>	<i>Greek noun</i>	<i>Greek word-forming element</i>	<i>Meaning</i>
aër, aëris m	átos, pnéuma	pneuma-, pneumat-	air
apex, īcis m	ácrōn-	acr-	apex, end
adeps, īpis m	lípos; stear, steatos	lip-	fat
calor, ūris m	thérme	therm-	heat, warmth
carbo, ūnis m	ánthrax, ánthracos	anthrac-	coal
color, ūris m	chróma, chrómatoς	chromat-	colour
dens, ntis m	odús, odóntos	chrom- odont-	tooth
dolor, ūris m	odýne, álgos	odyn-, alg-	pain, ache
ignis, is m	pyr, pyrós	pyr-	fire
homo, īnis m	ánthropos	anthrop-	human being
mensis, is m	men, menós	men-	month
pavor, ūris m	phōbos	phob-	fear, phobia
pes, pedis m	pus, podós	pod-	foot
piscis, is m	ichthýs	ichthy-	fish
pulmo, ūnis m	pnéumon	pneum-, pneumon- (pulmo- is also used)	lung
sanguis, īnis m	haéma, haématoς	haem- haemat-	blood
sudor, ūris m	hidrós	hidr-	sweat
tendo, īnis m	ténōn	ten-	tendon, sinew
unguis, is m	ónyx, ónychos	onych-	nail
venter, tris m	gastér, gastrós	gastr-	stomach
sopor, ūris	cóma	com-	deep
			unconsciousness

N.B.! One should distinguish TE *pneum(on)-* (referring to the lungs) and *pneuma(t)-* (referring to air).

### The Greek and Latin noun doublets (feminine gender, III<sup>rd</sup> declension)

<i>Latin noun</i>	<i>Greek noun</i>	<i>Greek word-forming element</i>	<i>Meaning</i>
articulatio, ūnis f	árthron	arthr-	joint, articulation
auris, is f	otós	us, ot-	ear
caro, rmis f	sark, sacrós	sarc-	meat
cutis, is f	dérma, dérmatos	derm-, dermat-	skin
cartilago, īnis f	chóndros	chondr-	cartilage
feces, ium f pl.	cópros	copr-	faeces
mater, tris f	méninx,	mening-	meninx
mors, rtis f	méningos		
pelvis renālis	thánatos	thanat-	death
sectio, ūnis f	pýelos	pyel-	renal pelvis
	tomé	tom-	cut, cutting, incision

### The III<sup>rd</sup> declension nouns

adiposītas, ātis f	obesity
rubor, ūris m	reddening
functio, ūnis f	function
herpes, ētis m	herpes
livor, ūris m	bruise
pavor, ūris m	fear, phobia
stupor, ūris m	stupor
tremor, ūris m	tremor
gravidītas, ātis f	pregnancy
amputatio, ūnis f	amputation
extractio, ūnis f	extraction
inflammatio, ūnis f	inflammation
curatio, ūnis f	treatment
sanatio, ūnis f	sanation
exacerbatio, ūnis f	exacerbation
complicatio, ūnis f	complication
resectio, ūnis f	resection
transfusio, ūnis f	transfusion

## N.B.! Colours

Latin / Greek element	Meaning
cyan(o)-	blue
erythr(o)-, rhod-	red
leuc(o)-, leuk-	white
melan(o)-	dark, black
poli(o)-	grey (substance of the cerebrum)
xanth(o)-	yellow

*References: Compulsory*

## Practicing.

Doing an exercise 1, p. 213-214. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 216.

## III. Заключна частина заняття:

Подача домашнього завдання:

- to read § 134-136;
- to memorize Greek and Latin doublets for a dictation § 134-136;
- to do exercises 2-3, pp. 214-216.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

**Тема заняття: The Greek and Latin doublets of the 3<sup>rd</sup> declension of nouns. Neutral. The word-forming elements with the ending -sis. - 2 год.**

**Методичне забезпечення заняття:**

**Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

**Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

**Мета заняття:**

**Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Греко-латинські дублети іменників III відміни”;
- Навчити утворювати клінічні терміни;
- Навчити розрізняти греко-латинські дублети іменників середнього роду III відміни;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хв).

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (20-30 хв).
2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Similia similibus curantur.* – Like cures like.

*Luna latrantem canem non timet.* – The Moon does not heed the barking of dogs.

*Nemo amat, quem timet.* – No man loves the one whom he is afraid of.

*Cum grano salis.* – With a grain of salt.

*Nummum verso.* – The reverse side of the medal.

*Verum in caeco est.* – Truth lies at the bottom of a well.

*Ex igne in flammam.* – Out of the frying pan into the fire.

**II. Основна частина**

**1. Homework checking.**

- revision of the material §§ 134-136;
- checking exercises 2-3, pp. 214-216;
- a dictation § 134-136;
- a quiz.

### **Variant 1**

- 1. Make up the Greek clinical terms with the given meaning:**  
morbid fear of death, incision of renal pelvis, hernia of medulla.
- 2. Translate clinical terms, determine the meaning of word-forming elements:**  
leucodermia, ichthyosis, hidradenitis.
- 3. Translate clinical diagnoses:**
  - a) into English:** fractura pedis dextri clausa
  - b) into Latin:** extraction of the molar tooth
- 4. Translate into Latin the following prescription:**

Rx: "Allochol" obducted tablets in number 50

Dispense.

Sign.

### **Variant 2**

- 1. Make up the Greek clinical terms with the given meaning:**  
treatment with heat, measurement of human being, softening of a nail.
- 2. Translate clinical terms, determine the meaning of word-forming elements:**  
sphygmographia, tenorrhaphia, coprophilia.
- 3. Translate clinical diagnoses:**
  - a) into English:** extirpation laryngis totalis
  - b) into Latin:** cyst of uterus cervix
- 4. Translate into Latin the following prescription:**

Rx : Mercury dichloride 0,2

Carbolic acid 4,0

Lanoline

Vaseline equally 50,0

Mix to form an ointment. To dispense .

To sign.

### **Variant 3**

- 1. Make up the Greek clinical terms with the given meaning:**  
science of blood, inflammation around tooth, disease of joints.
- 2. Translate clinical terms, determine the meaning of word-forming elements:**  
dyschromatopsia, algia, chondromalacia.
- 3. Translate clinical diagnoses:**
  - a) into English:** transfusio sanguinis intravenosa
  - b) into Latin:** chronic angular cheilitis

#### 4. Translate into Latin the following prescription:

Rx: Powder of digitalis leaves 0,1

Cocoa butter 2,5

Misce to form suppository. Dispense 5 such doses.

Sign.

New words: *digitalis* – *Digitalis*, is f (medicinal plant)

*cocoa* – *Cacao*, n (only one dictionary form)

*butter* – *butyrum*, i n

#### 2. Explanation of the new material, using the tables on the blackboard.

The Greek and Latin doublets (neuter gender, III declension)

<i>Latin noun</i>	<i>Greek noun</i>	<i>Greek word-forming element</i>	<i>Meaning</i>
abdomen, īnis n	lapára	lapar-	abdomen
cadaver, ēris n	necrós	necr-	corpse, cadaver
caput, ītis n	cephalé	cephal-	head
cor, cordis n	cardía	cardio-	heart
corpus, ḫris n	sóma, somatos	somat-	body
fel, fellis n	chóle	chol-	gall, bile
lac, lactis n	gála, gálactos	galact-	milk
lien, liēnis m	splen	splen-	spleen
os, oris n	stómat	stomat-	mouth, oral cavity
os, ossis n	osteon	oste-	bone
pus, puris n	pýon	py-	pus
ren, renis m	nephros	nephro-	kidney
semen, īnis n	spérmat	spermat-	semen, sperm
sol, solis m	hélios	heli-	sun
tempus, ḫris n	chrónos	chron-	time
viscus, ēris n	splánchnon	splanchn-	internal organ
pectus, ḫris n	stéthos	steth-	chest

### The word-forming elements with the ending -sis.

<i>Combining forms (suffix)</i>	<i>Meaning</i>
-emēsis	vomiting
-genēsis	origin, formation, development of disease
-gnōsis	knowledge
-lýsis	separation, loosening, dissolving, destruction
-mycōsis	fungus disease
-necrōsis	death of tissue
-poësis	formation, production
-porōsis	reduced density
-ptosis	dropping, downward displacement
-praxis	execution
-pyrōsis	burning sensation
-rrhexis	rupture
-schīsis	fissure, splitting
-sclerōsis	hardening
-stāsis	suppression, stoppage
-stenōsis	narrowing, constriction
-lithiāsis	calculus formation

**N.B.!** TE *-pyrōsis* can be used as a separate gastroenterological term that means “heartburn”.

### The III<sup>rd</sup> declension nouns

glaucōma, ātis n coma, ātis n oedēma, ātis n symptōma, ātis n ulcus, ēris n vulnus, ēris n	glaucoma coma (o)edema symptom ulcer wound
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References: Compulsory

## **Practicing.**

Doing an exercise 1 (the 1<sup>st</sup> column), p. 219. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 221.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 137-139;
- to memorize Greek and Latin doublets for a dictation § 137-139;
- to do exercises 2-3, pp. 220-221.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 13

**Тема заняття:** The Greek and Latin doublets of the 3<sup>rd</sup> declension of nouns. The most commonly used Greek suffixes. - 2 год.

### **Методичне забезпечення заняття:**

#### **Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
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4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

#### **Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

### **Мета заняття:**

#### **Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Греко-латинські дублети іменників середнього роду III відміни”;
- Навчити утворювати клінічні терміни;
- Навчити розрізняти греко-латинські дублети прикметників;
- Навчити утворювати клінічні терміни за допомогою суфіксів;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хв).

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (20-30 хв).
2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Omnium artium medicīna nobilissīma est.* – Medicine is of all arts the most noble.

*Vim vi repellēre licet.* – Fight power with power.

*Qui tacent, consentit.* – Silence Dispenses consent.

*Urbi et orbi.* – To the city and to the world.

*Nullum malum sine aliquo bono.* – Every cloud has a silver lining.

*Ignorantia legis nemīnem excūsat.* – Ignorance of the law is no excuse.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 137-139;
- checking exercises 2-3, pp. 220-221;
- a dictation § 137-139;
- a quiz.

### **Variant 1**

**1. Make up the Greek clinical terms with the given meaning:**

red skin, stoppage of lymph, science of internal organs.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

cardiosclerosis, onychorrhesis, stomatomycosis.

**3. Translate clinical diagnoses:**

a) **into English:** oedemata membrōrum inferiōrum

b) **into Latin:** bilateral complication of pneumonia (pneumonia, ae f)

**4. Translate into Latin the following prescription:**

Rx: Infusion of St. John's wort herb 20,0 – 150 ml

Dispense.

Sign.

*New word: St. John's wort – Hypericum, i n (medicinal plant)*

### **Variant 2**

**1. Make up the Greek clinical terms with the given meaning:**

narrowing of uterine tube, presence of pus in urine, section of abdomen.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

hydrocephalia, thoracoschisis, nephrocarcinoma.

**3. Translate clinical diagnoses:**

a) **into English:** ruptura septi untraversableis

b) **into Latin:** endophlebitis of hepatic veins

**4. Translate into Latin the following prescription:**

Rx: Codeine phosphate 0,015

Sodium hydrocarbonate 0,25

Mix to form a powder. Dispense such doses in number 10.

Sign.

### **Variant 3**

**1. Make up the Greek clinical terms with the given meaning:**

non-inflammatory process of the bones, presence of gall in the blood, softening of the brain.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

pericarditis, heliotherapia, haematemesis.

**3. Translate clinical diagnoses:**

a) **into English:** tuberculosis nodōrum lymphaticōrum

b) **into Latin:** aseptic necrosis of the zygomatic bone

#### 4. Translate into Latin the following prescription:

Rx: "Sanitas" liniment 50,0

Dispense.

Sign.

#### 2. Explanation of the new material, using the tables on the blackboard.

##### The Greek and Latin doublets of the III declension adjectives

<i>Latin adjective</i>	<i>Greek adjective</i>	<i>Greek word-forming element</i>	<i>Meaning</i>
aequālis, e	hómoeos homós	homoeo- homo-	same, unchanging
brevis, e	brachýs	brachy-	short
celer, ēris, ēre	tachýs	tachy-	rapid
dulcis, e	glykýs	glyc- glyk-, gluc-	sweet
impar, is	ánisos	aniso-	unequal, dissimilar
mollis, e	malakós	malac-	soft
omnis, e	pas, pantós	pan-, pant-	all, any
par, paris	íisos	iso-	equal, similar
puter, tris, tre	saprós	sapr-	rotten, putrid
senex, senis	géron, gérontos	ger-, geront-	old, senile
vir̄idis, e	chlorós	chlor-	green

##### Adjectives of the 3<sup>rd</sup> declension

fibrillāris, e  gravis, e  infans, ntis  homogēnes, is	threadlike, filiform  heavy, weighty  child's, children's, infantile  uniform, homogenous
--	---

letālis, e	lethal, fatal
mortālis, e	mortal
stabīlis, e	stable, stationary
mollis, e	soft
inaequālis, e	unequal
filiformis, e	filiform, threadlike
celer, ēris, ēre	quick, fast
frequens, ntis	frequent

### Word-building by means of suffixes

In word-building of clinical terms, suffixes are classified due to their functions into:

- suffixes, forming terms with new meanings. They are mainly added to the stems of Greek nouns; however, sometimes they may be added to the Latin nouns as well, e.g., tonsillītis – inflammation of tonsils, fibrōma – benign tumour of the connective tissue;
- suffixes, forming clinical terms with a new connotation in meaning.

<b><i>Suffix (including ending)</i></b>	<b><i>Meaning</i></b>	<b><i>Example</i></b>
-ītis, itīdis f	Inflammation (disease of inflammatory nature)	dermatītis – inflammation of the skin; angiītis – inflammation of vessels
-ōsis, is f	uninflammatory chronic diseases, numerous formations, abnormal condition caused by lack or increase of the certain elements	dermatōsis – skin disease leucocytōsis – excess of leucocytes in the blood
-iāsis, is f	uninflammatory diseases, signs of diseases	nephrolithiāsis – presence of renal calculi distichiāsis – presence of a double row of eyelashes on an eyelid
-ēma, ātis n	rashes, oedemas, abscesses	empyēma, ātis n – accumulation of pus in the cavity
-ōma, ātis n	tumour (the presence of neoplasm in certain tissues or organs)	dermatōma, ātis n – skin tumour, myoma, ātis n – muscle tumour

-ismus, i m	painful condition, congenital or acquired pathology, deviation	alcoholismus, i m – chronic alcoholism iodismus, i m – poisoning with iodine
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- N.B.!** 1. Greek prefixes ***en-***, ***em-*** (before ***b*** and ***p***), ***endo-***, ***para-***, ***peri-*** are used to detail the localization of the inflammatory process.
2. Prefixes ***hypo-***, ***hyper-***, ***pro-*** are used in formation of the terms with suffix -ismus.
3. The terms ***carcinōma, ātis n*** and ***sarcōma, ātis n*** are used to denote malignant tumors – the first name is used for tumours originated from the epithelium, the second one – from the mesenchyma. The term ***carcinōma, ātis n*** can be used both independently and as a final TE, e.g.: cheilocarcinōma – cancer of the lip.
4. Some terms with the suffix ***-ōma*** don't indicate diseases of neoplastic nature, e.g.: glaucōma, ātis n, haematōma, ātis n.
5. The term ***oedēma, ātis n*** (swelling) can be used both independently and as a final TE, e.g.: blepharoedēma, ātis n – swelling of the eyelids.

*References: Compulsory*

### Practicing.

Doing an exercise 1, p. 225. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 226.

### III. Заключна частина заняття:

Подача домашнього завдання:

- to read § 140-142;
- to memorize Greek and Latin doublets for a dictation § 140-142;
- to do exercises 2-5A, pp. 225-226.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 14

**Тема заняття:** The Greek and Latin doublets of the 4<sup>th</sup> and 5<sup>th</sup> declensions of nouns. - 2 год.

### **Методичне забезпечення заняття:**

#### **Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

#### **Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

### **Мета заняття:**

#### **Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Греко-латинські дублети прикметників III відміни”;
- Навчити утворювати клінічні терміни;
- Навчити розрізняти греко-латинські дублети іменників IV-V відмін;
- Навчити утворювати клінічні терміни за допомогою суфіксів;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хв).

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (20-30 хв).

2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi!* – *Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Vox clamantis in deserto.* – A voice in the wilderness.

*Am̄ īcus Plato, sed magis amīca verītas.* – Plato is dear to me, but truth is dearer still. (Aristotle)

*Suum cuique tribue!* – Repay to everyone for his deeds.

*Manus manum lavat.* – One hand washes the other.

*Ex privāta industria.* – On one's own initiative.

*Ratio melior auro est.* – Use sense, not cents.

*Quanti quisque se ipse facit, tanti fit ab am̄ īcis.* – Respect yourself, or no one will respect you.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 140-142;
- checking exercises 2-5A, pp. 225-226;
- a dictation § 140-142;
- a quiz.

### **Variant 1**

#### **1. Make up the Greek clinical terms with the given meaning:**

science of old men (diseases), more than normal level of glucose in blood, muscle tumour.

#### **2. Translate clinical terms, determine the meaning of word-forming elements:**

brachycephalia, panphobia, otomycosis.

#### **3. Translate clinical diagnoses:**

a) **into English:** keratitis marginalis superficialis

b) **into Latin:** traumatic luxation of ulna

#### **4. Translate into Latin the following prescription:**

Rx: Decoction of cowberry leaves 10,0 – 100ml

Dispense.

Sign.

*New word: cowberry – Vitis (is f) idaea (ae f) (medicinal plant)*

### **Variant 2**

#### **1. Make up the Greek clinical terms with the given meaning:**

green vision, inflammation of spleen, rupture of uterus.

#### **2. Translate clinical terms, determine the meaning of word-forming elements:**

tachysphygmia, cardiagia, nephrocarcinoma.

#### **3. Translate clinical diagnoses:**

a) **into English:** atherosclerosis arteriārum coronariārum et aortae

b) **into Latin:** chronic gangrenous pulpitis

#### **4. Translate into Latin the following prescription:**

Rx: Ephedrine hydrochloride

Dimedrole equally 0,025

Mix to form a powder. Dispense such doses in number 5.

Sign.

### **Variant 3**

#### **1. Make up the Greek clinical terms with the given meaning:**

inflammatory process of the joints, presence of kalium in the blood, softening of a nail.

#### **2. Translate clinical terms, determine the meaning of word-forming elements:**

pericarditis, encephalomalacia, stethomyositis.

#### **3. Translate clinical diagnoses:**

a) **into English:** infarctus myocardii transmuralis

b) **into Latin:** pyloroanthral resection of stomach

#### 4. Translate into Latin the following prescription:

Rx: Simple plaster of lead 50,0

Dispense.

Sign.

#### 2. Explanation of the new material, using the tables on the blackboard.

The Greek and Latin doublets of the IV<sup>th</sup> declension

<i>Latin adjective</i>	<i>Greek adjective</i>	<i>Greek word-forming element</i>	<i>Meaning</i>
appetīus, us m	órexis	orex-	appetite
audītus, us m	ácusis	acu-, acus-	hearing
cornu, us n	kéras, kératos	kerat-	horn horn tissue horn cells
ductus beliferi	-	cholangi-	bile ducts
foetus, us m	émbryon	embry-	embryo, fetus
gelu, us n	crýos	cry-	cold, ice, frost
genu, us n	goný	gon-	knee
gustus, us m	géusis	geus-	taste
manus, us f	cheir	cheir-, chir-	arm, hand
motus, us m	kínesis	kine-, kinem-, kinemat-, kines-	movement related to motion
olfactus, us m	osmē	osm-	smell
partus, us m	tócos	toc-	childbirth
pulsus, us m	sphygmós	sphygm-	pulse
sensus, us m	aésthesis	aesthes-	feeling

			sensuality
spiritus, us m	pneuma, pneumatos	<b>pneum-</b> , <b>pneuma-</b> , <b>pneumo-</b> , <b>pneumat-</b>	breathing air
textus, us m	histós	<b>hist-</b>	tissue
visus, us	óps, ópos, ópsis	<b>op-</b> , <b>ops-</b> , <b>opt-</b> <b>optic-</b>	vision eye
vomitus, us m	émetos	<b>emet-</b>	vomiting

### The Greek and Latin doublets of the V<sup>th</sup> declension nouns

<i>Latin adjective</i>	<i>Greek adjective</i>	<i>Greek word-forming element</i>	<i>Meaning</i>
facies, ēi f	prósopon	<b>prosop-</b>	face
rabies, ēi f	lýssa	<b>lyss-</b>	rabies
species, ēi f	eídos	<b>id-</b>	species

### N.B.! Nouns of the IV<sup>th</sup> declension

abortus, us m	abortion
abscessus, us, m	abscess
collapsus, us m	collapse
complexus, us m	complex
cursus, us m	course
habitus, us m	appearance
decubitus, us m	bedsore, decubitus
exītus, us m	end
gradus, us m	grade
infarctus, us m	infarction
insultus, us m	stroke
prolapsus, us m	prolapse
reflexus, us m	reflex
refluxus, us m	reflux (flow in reverse direction)

singultus, us m situs, us m status, us m	hiccough, hiccup, singultus position condition
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### N.B.! Nouns of the V<sup>th</sup> declension

caries, ei f dies, ei f pernicies, ei f rabies, ei f scabies, ei f sanies, ei f facies Hippocratica	caries day perdition rabies scabies blood with pus, sanies hippocratic face
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*References: Compulsory*

### Practicing.

Doing an exercise 1, p. 229. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 230.

### III. Заключна частина заняття:

Подача домашнього завдання:

- to read § 143-146;
- to memorize Greek and Latin doublets for a dictation § 143-146;
- to do exercises 2-3, pp. 229-230.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 15

**Тема заняття:** The Greek and Latin prefixes. The numerals and adverbs used as prefixes. - 2 год.

### **Методичне забезпечення заняття:**

#### **Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
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4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

#### **Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

### **Мета заняття:**

#### **Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Греко-латинські дублети іменників IV-V відмін”;
- Навчити утворювати клінічні терміни за допомогою латинських префіксів та суфіксів;
- Ознайомити з прислівниками та числівниками в ролі префіксів;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хв).

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (20-30 хв).
2. Пояснення нового матеріалу та виконання тренувальних вправ з теми (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Primus inter pares.* – First among equals.

*Unus pro omnibus et omnes pro uno.* – One for all, and all for one.

*Tertium non datur.* – A third is not dispensable.

*Tertius gaudet.* – When two fight, the third enjoys.

*Duos qui leporum sequitur, neutrum capit.* – If you run after two hares, you will catch none.

*Septem miracula.* – The seven wonders of the world.

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 143-146;
- checking exercises 2-3, pp. 229-230;
- a dictation § 143-146;
- a quiz.

### **Variant 1**

**1. Make up the Greek clinical terms with the given meaning:**

more than normal level of hearing, science of tissues, pain of face.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

cryotherapia, anophthalmia, lyssophobia.

**3. Translate clinical diagnoses:**

a) **into English:** insultus lobi dextri cerebri

b) **into Latin:** intestinous renal reflux

**4. Translate into Latin the following prescription:**

Rx: Suppositories with glycerin in number 12

Dispense.

Sign.

### **Variant 2**

**1. Make up the Greek clinical terms with the given meaning:**

less than normal sensibleness (sense), inflammation of knee joint, section of vagine.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

keratoplastica, anorexia, pancreatocarcinoma.

**3. Translate clinical diagnoses:**

a) **into English:** ruptura parietis anterioris vaginae

b) **into Latin:** fracture of major tubercle of humerus

**4. Translate into Latin the following prescription:**

Rx : Infusion of foxglove leaves 0,5 – 200 ml

Peppermint oil 3 drops

To mix. To dispense.

To sign.

*New words: foxglove – Digitalis, is f*

*peppermint – Mentha(ae f) piperita (ae f)*

### **Variant 3**

**1. Make up the Greek clinical terms with the given meaning:**

inflammation of cornea, graphy of pulse, science of foetus.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

achromatopsia, dysosmia, kinesiotherapia.

**3. Translate clinical diagnoses:**

a) **into English:** abscessus glandularum lymphaticarum

b) **into Latin:** profound caries of inferior canine teeth

**4. Translate into Latin the following prescription:**

Rx: Carbolic acid 3 % - 200 ml

Dispense.

Sign.

## 2. Explanation of the new material, using the tables on the blackboard.

### Word-building by means of Latin and Greek prefixes

Learning and understanding of the medical terminology requires the profound knowledge of etymology and meaning of the most commonly used Greek and Latin word-forming elements (combining forms, prefixes, suffixes). They make terms concrete and accurate, define their content.

Medical terms may be formed:

- by adding prefixes and suffixes;
- by combining two or more stems (roots).

Prefixes are placed in front of a word in order to add the shade of meaning or to change it insignificantly. Prefixes have developed from prepositions and adverbs. They develop the specific meaning of the appropriate preposition. Besides the primary meaning, prefixes possess literal, direct and figurative meanings, e.g., Greek prefix *para-* indicates a capsule or cellular tissue that surrounds an organ, e.g., *paratonsilitis* means inflammation of a tonsil, but it may have a figurative meaning as well “disturbance, fluctuation from the norm”, e.g., *parageusia* implies distortion of the sense of taste.

Components formed from numerals are also regarded as prefixes. Latin prefixes, unlike the Greek ones, predominate in anatomical terminology. In clinical terminology prefixes of Greek origin are found more frequently.

The last consonant assimilates to the initial root consonant. Some Latin prefixes have exactly the same meaning as the Greek ones.

### Word-building by means of Latin prefixes

<i>Latin prefix</i>	<i>Meaning</i>	<i>Example</i>
a-, ab -, abs-	not, without, lack of, absence, away from	<i>abducens</i> – abducent <i>abstinentia</i> – abstinence
ad-	movement to or toward, near	<i>aditus</i> – entrance
ante-	before, in front of, prior to	<i>antebrachium</i> – forearm
circum-	around	<i>circumflexus</i> – circumflexus
com-, col-, cor-	with, together, joined	<i>compositus</i> – complex <i>collapsus</i> – collapse
con-, co-	with, together	<i>contorsio</i> – sprain
contra-	against	<i>contraindicatio</i> – contraindication
de-	down, without, removal, loss	<i>descendens</i> – descending

dis-, di-	absence, removal, separation	disseminatio – dissemination
e-, ex-	away from, outside	exarthrosis – dislocation of a joint
extra-	outside	extracardiālis – extracardial
in-	movement in (into)	incrementum – increment
infra-	below	infrasternālis – infrasternal
inter-	between	intercostālis – intravertebral, intercostal
intra -	in, within	intravenōsus – intravenous
ob-	movement toward, movement around	oblongātus – oblongate
per-	through	perforatio – perforation
post-	after, behind	postoperatīvus – postoperative
prae(pre)-	before, in front of	praecordium – precordial
pro-	before, in front of	prostratio – exhaustion, weakness, prostration
re-	again, back, movement back	recurrens – reverse, recurrence regeneratio – regeneration
se-	separation	separatio – separation
sub-, sus-	below, under, lower degree	subcutaneus – subcutaneous subacūtus – subacute (neither acute nor chronic)
super-, supra-	above, excess	superficies – external surface; superficial superaciditas – excessive acidity; superacidity
trans -	through, across, beyond	transversus – cross, transversal transfusio – transfusion

### Word-building by means of Greek prefixes

<i>Greek prefix</i>	<i>Meaning</i>	<i>Example</i>
a-, an-	negation, denial	achylia – deficiency or absence of pepsin and hydrochloric acid from the gastric juice
amphi-	movement around	amphiarthrōsis – amphi arthrosis; immovable joint
ana-	movement up	anabolismus – anabolism; assimilation, transformation of foodstuffs into live substance
anti-	opposition	antidiurēsis – antidiuresis; decrease in the urine output
apo-	isolation, separation	apophysis – apophysis; any condition marked by aphthae
dia-	through, movement and expansion in space and time	diathēsis – diathesis; disposition of the body to some disease
dys-	abnormal, painful, difficult	dysosmia – dysosmia; disturbance of olfaction
ecto(ec)-	excision, surgical removal	extoderma – ectoderm; the outer germ layer of an animal embryo
exo(ex)-	outside	exostōsis – exostosis; an abnormal bony outgrowth from the surface of a bone
en-, endo-	in, within	endocrinologia – endocrinology: science about glands of internal secretion enurēsis – enuresis; involuntary discharging of urine
epi-	upon, over	epidurālis – epidural; situated above dura mater

		of the brain
hemi-	hemi, one side	hemialgia – hemialgia; pain affecting one side of the body only
hyper-	over, excess, increased, abnormally high	hypersalivatio – hypersalivation, ptyalism; excessive flow of saliva
hypo-	under, below, decreased, abnormally low	hypogalactia – decreased excretory function of mammary glands
meta-	change, transition	metamorphōsis – metamorphosis; transformation, change of shape or structure
para-	near, beside	paranephritis – paranephritis; inflammation of the connective tissue around and near the kidney
peri-	around	periostītis – periostitis; inflammation of the periosteum
pro-	before, in front of	prognōsis – prognosis; a prediction of the course or outcome of a disease or disorder
syn-	together	synchondrōsis – synchondrosis; connection of bones with cartilage tissue

### The adverbs serving as prefixes

Latin adverb	Greek adverb	Meaning	Example
bene	eu	well	euthanasia – euthanasia; an easy or painless death; mercy killing
saepe	pollakis	often	pollaki(s)uria – pollakisuria; frequent urination
multum	poly	many	polyphagia – polyphagia; an abnormal desire to consume excessive

				amounts of foof, esp. as the result of a neurological disorder
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### Word-building by means of Latin and Greek numerals

<i>Latin numeral</i>	<i>Greek numeral</i>	<i>Meaning</i>	<i>Word-building element</i>	<i>Example</i>
unus, a, um	heis, mia, hen	one	un-	muscūlus unipennātus – unipennate muscle
duo, ae, o	dyo	two	du-	utērus septus duplex – septate uterus
tres, tria	treis, tria	three	tri-	os triquetrum – triangular bone
quattuor	tettares, tettara	four	quadr-	muscūlus quadriceps femōris – quadriceps muscle of thigh
quinque	pente	five	quint-, pent-	pentquintipāra, ae, f – a woman who has Dispensen birth to a viable infant in each of five pregnancies pentastōma, ātis n – Pentastoma
sex	hex	six	sex-	sextipāra, ae f – gravida VI – a woman who has Dispensen birth to a viable infant in each of six pregnancies
septem	hepta	seven	hex-, sept-, hept-	Hexamethylentetramīnum – hexamethylentetramine septigravida, ae f – pregnant for the seventh time Heptānum – heptaene
octo	octo	eight	oct-	Octoestrōlum, i n – octoestrol
decem	deca	ten	dec-	Decamevītum, i n – Decamevit

undecim	héndeca	eleven	unde-, hende-	Undevītum, i n – Undevit Hendevītum, i n – Hendevit
mille		thousand	milli-	milligramma, ātis n – milligram
duodeni, ae, a		twelve	duoden-	flexura duodēni superior – superior flexure of duodenum
semis	hémisy	half	semi-, hemi-	plica semilunāris – semilunar fold hemiplegia – hemiplegia; paralysis of one side of the body
primus, a, un	protos	the first	prim-, prot(o)-	primigravīda, ae f – pregnant for the first time protoplasma, ātis n – protoplasm
tertius, a, um	tritos	the third	tert-,	tritmalaria tertīana tritaponia – tertian malaria tritaponia – blue colour-blindness
bis	dis	twice	bi-, di-	muscūlus bipennātus – bipennate muscle muscūlus digastrīcus – biventral, digastric (muscle)
quater	tetrakis	four times	quartertetra	syphilis quaternaria – quaternary syphilis tetragōnum lumbāle – lumbar tetragon

References: Compulsory

### Practicing.

Doing an exercise 1, pp. 237-238. A teacher controls the reading and corrects the answers.

At the end of the class we recommend to read information from a section “Do you know that...” p. 239.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 147-151;
- to memorize Greek and Latin doublets for a dictation § 148-151;
- to do exercises 2-3, pp. 238-239.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Valete, studiosi! – Vale(te), magistra!

## THEME 16

**Тема заняття:** The translation of clinical diagnoses. Practical skills. Quiz “Clinical Terminology”. - 2 год.

### **Методичне забезпечення заняття:**

#### **Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
3. Latin Language for Students of Dental Faculties = Lingua Latina ad Usum Stomatologiae Studentium : textbook / O.M. Bieliaieva, V.H. Synytsia, L.Yu. Smolska et al.; edited by O.M. Bieliaieva. – Kyiv : AUS Medicine Publishing, 2018. – 488 p.
4. Latin and Fundamentals of Medical Terminology : Handbook for the I<sup>st</sup> year English-Speaking Students of the Medical Faculties / comp. : T. Titiyevska, O. Gordiyenko, A. Kulichenko, M. Martanova. – Zaporizhzhia : ZSMU, 2016. – 141 p.
5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

#### **Додаткова література:**

1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

### **Мета заняття:**

#### **Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Грецькі та латинські числівники й прислівники у клінічній термінології”;
- Навчити перекладати та розуміти клінічні діагнози;
- Визначити за допомогою підсумкової самостійної роботи рівень засвоєння теоретичного матеріалу з теми “Клінічна термінологія”;

- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення латинської мови.

### План заняття

**I. Вступна частина** – організаційний момент (10 хв).

**II. Основна частина:**

1. Повторення вивченого матеріалу, перевірка домашнього завдання (20-30 хв).
2. Пояснення нового матеріалу та написання підсумкової самостійної роботи рівень засвоєння теоретичного матеріалу з теми “Клінічна термінологія” (45 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

### Хід заняття

**I. Вступна частина** – організаційний момент

- привітання *Salvete, studiosi! – Salve(te), magistra!*
- перевірка відсутніх;
- фонетична зарядка:

*Contra spem spero. – To hope against hope.*

*Est brevit̄e opus, ut currat sententia. – Brevity is the soul of wit.*

*Aut cum scuto, aut in scuto. – With the shield or on it.*

*Contra factum non est argumentum. – Facts are stubborn things.*

*Non fuit in solo Roma peracta die. – Rome was not built in a day.*

*Imperāre sibi – maxi tum imperium est. – Learn to control yourself.*

*Finis corōnat opus. – The end crowns the work.*

**II. Основна частина**

**1. Homework checking.**

- revision of the material § 147-151;
- checking exercises 2-3, pp. 238-239;
- a dictation § 148-151;
- a quiz (за бажанням викладача та за наявності часу).

### **Variant 1**

**1. Make up the Greek clinical terms with the given meaning:**

less than normal blood pressure, absence of appetite, near heart inflammation.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

synphalangia, paraproctosis, polyphagia.

**3. Translate clinical diagnoses:**

a) **into English:** erythema cutis faciēi

b) **into Latin:** replantation of the left hand

**4. Translate into Latin the following prescription:**

Rx: Oil retinole acetate solution 0,1 % - 10 ml

Dispense.

Sign.

### **Variant 2**

**1. Make up the Greek clinical terms with the given meaning:**

more than normal sensibility (sense), around vein inflammation, abnormal hearing.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

endometriosis, anophthalmus, polyotia.

**3. Translate clinical diagnoses:**

a) **into English:** insufficientia corticis suprarenalis chronica

b) **into Latin:** tachycardia of the left ventricle

**4. Translate into Latin the following prescription:**

Rx: Dibazole 0,05

Sugar 0,3

Mix to form a powder. To dispense such doses in number 10.

To sign.

### **Variant 3**

**1. Make up the Greek clinical terms with the given meaning:**

near kidney inflammation, extra finger, abnormal digestion.

**2. Translate clinical terms, determine the meaning of word-forming elements:**

decamevitum, achromatopsia, dysosmia.

**3. Translate clinical diagnoses:**

a) **into English:** achylia gastris functionalis

b) **into Latin:** abscess of lymphatic glands

**4. Translate into Latin the following prescription:**

Rx: Dilute hydrochloric acid 5 ml

Pepsine 2 ml

Purified water up to 180 ml  
 Raspberry syrup 20 ml  
 Mix. Dispense.  
 Sign.

*New word: raspberry – Rubus (i, m) idaeus (i, m)*

## 2. Explanation of the new material, using the tables on the blackboard.

### The translation of diagnoses names

Diagnosis is the identification of diseases by the examination of symptoms, signs, and case history (anamnesis) and by other investigations. The term “diagnosis” is of Greek origin (Greek *diagnōsis*, meaning distinguishing). It denotes the medical conclusion as to the health condition of a sick person, his/her present illness (trauma) or the cause of death.

Diagnostic nomenclature is an open subsystem of the clinical terminology with numerous functional peculiarities which are stipulated, first of all, by two types of term-formation. In diagnosis name formation, the components commonly used in clinical terminology combine with agreed and non-agreed attributes, which is typical for anatomical terminology. The overwhelming majority of diagnoses names are formed by combining clinical and anatomical terms. The peculiarities of their orthography and orthoepy are based on the rules of the Latin language and borrowings from the ancient Greek.

While translating the diagnostic nomenclature into English a particular attention must be paid to the phonetic variety of some clinical terms (cephalia – brachycephaly and brachycephalism) and the orthographic variation (neuro- – neuropathy and neurocytoma). Nevertheless it is inadmissible to misinterpret the terms.

Type of a modifier	Term structure		Example
agreed	Noun (Nom.sing./pl.) + Adjective/ Participle (Nom.sing./pl.)		fractura complicata
non-agreed	Noun (Nom.sing./pl.) + Noun (Gen.sing./pl.)		emphysema pulmonum
mixed	Noun (Nom.sing./pl.) + Noun (Gen.sing./pl.)	Adjective/Participle (Nom.sing./pl.)	inflammatio bronchorum acuta
		Adjective/Participle (Gen.sing./pl.)	inflammatio bronchi dextri

*References: Compulsory*

## **Practicing.**

Practical skills. Quiz “Clinical Terminology”. Написання підсумкової самостійної роботи рівень засвоєння теоретичного матеріалу з теми “Клінічна термінологія” (See *Appendix II*).

At the end of the class we recommend to read information from a section “Do you know that...” p. 247.

### **III. Заключна частина заняття:**

Подача домашнього завдання:

- to read § 152;
- to do exercises 1,3,5, pp. 241-246;
- to be ready for a final test “Latin Medical Terminology” and look though “Patterns of examinations for final and content-oriented draded test” pp. 248-258.

Підведення підсумків, виставлення оцінок.

Do you have any questions? No questions, fine. Our class is over. Have a nice time. See you next week. Be ready for a final test. Valete, studiosi! – Vale(te), magistra!

## THEME 17

**Тема заняття: Final test “Latin Medical Terminology”. - 2год**

### **Методичне забезпечення заняття:**

#### **Основна література:**

1. The Latin Language and Medical Terminology Basics : textbook / L.Yu. Smolska [et al.] ; ed. by.: L.Yu. Smolska. – 4th ed. – Kyiv : Medicine, 2018. – 400 p.
2. Demchenko O. The Latin Language and the Fundamentals of Medical terminology : Manual / O. Demchenko, M. Zakaliuzhnyi. – Ternopil : Ukrmedknyha, 2004. – 284 p.
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5. The Latin Language and Medical Terminology. Quizzes and Tasks for Practical Skills Evaluation for the First-Year Students of the Medical Faculties with the English Medium of Instruction, specialty 222 “General Medicine” = Латинська мова та медична термінологія. Зб. завд. для самост. роб. та завд. для перев. практ. навич. у студ.-іноз. гром. I курсу мед. ф-тів спец. 222 “Медицина” / T. Titiyevska, O. Gordiyenko, A. Kulichenko. – Zaporizhzhia : [ZSMU], 2019. – 79 p.

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1. Fałdrowicz W. Lingua Latina pro usu medico / W. Fałdrowicz, Z. Grech-Żmilewska. – Warszawa : Wydawnictwo Lekarskie PZWL, 2004. – 214 s.
2. Kołodziej A. Lingua Latina medicinalis / A. Kołodziej, S. Kołodziej. – Warszawa : Wydawnictwo Lekarskie PZWL, 2008. – 108 s.
3. Olędzka B. Latin in Medicine. Course for medical students / B. Olędzka. – Warszawa : Oficyna Wydawnicza WUM, 2013. – 234 s.

### **Мета заняття:**

#### **Практична:**

- Повторення та закріплення вивченого матеріалу з теми “Переклад клінічних діагнозів”;
- Визначити за допомогою підсумкової роботи рівень засвоєння теоретичного матеріалу з модулю I. та модулю II;
- Активізація пасивного словникового запасу студентів у запозиченнях з латинської мови та інтернаціоналізмах – похідних від латинської мови.

**Розвиваюча:**

- Розвиток пам'яті (зорової та слухової);
- Розвиток фонетичних вмінь та навичок.

**Виховна:**

- Прищеплювати інтерес до вивчення до латинської мови.

**План заняття****I. Вступна частина – організаційний момент (5 хвилин)****II. Основна частина:**

1. Написання підсумкової самостійної роботи рівень засвоєння теоретичного матеріалу з модулю I. та модулю II. (80 хв).

**III. Заключна частина** – підведення підсумків заняття, подача домашнього завдання (5 хв).

**Хід заняття****I. Вступна частина – організаційний момент:**

- привітання Salve, studiosi! – Salve(te), magistra!
- перевірка відсутніх;

**II. Основна частина****1. Homework checking:**

checking exercises 1, 3, 5, pp. 241-246. Студенти віддають викладачеві робочі зошити на перевірку як домашнього завдання з попередньої теми, так ведення конспекту з дисципліни.

**2.** Написання підсумкової самостійної роботи з модулю I. та модулю II., яка складається з двох частин: тестових завдань та завдань, націлених на перевірку практичних навичок з анатомічної, фармацевтичної та клінічної латинської термінології. Приблизні завдання наведено у розділі “Patterns of examinations for final and content-oriented draded test” стор. 248-258 підручника за загальною редакцією Л.Ю. Смольської.

**III. Заключна частина заняття:**

Підведення підсумків.

Do you have any questions? No questions, fine. Our class as well as academic year is over. Have a nice summer time. Valete, studiosi! – Vale(te), magistra!

## APPENDIX

### *Appendix I*

#### *Practical skills. Quiz “Pharmaceutical Terminology”*

#### VARIANT I

##### I. Translate into Latin:

- 1) oil camphor solution in spritz-tubules
- 2) aloe sirup with iron
- 3) tetracycline hydrochloride ophthalmic ointment
- 4) fluid extract of milfoil
- 5) arsenicous acid tablets

##### II. Explain the meaning of Greek and Latin roots in the drug names:

Sulfapyridazinum	Aethylmorphinum
Thioproperazinum	Platyphyllinum

##### III. Translate into Latin:

- 1) Rx: Reduced iron 1,0  
Ascorbic acid 0,1  
Mix. Dispense such doses in number 12 in capsules.  
Sign.

---

- 2) Rx: Diluted hydrochloric acid 20 ml  
Dispense in black bottle.  
Sign.

---

- 3) Rx: St. John's wort herb 20,0  
Sage leaves 30,0  
Peppermint leaves 10,0  
Mix to get species. Dispense.  
Sign.

---

- 4) Rx: Acetylsalicylic acid tablets 0,5 No 20  
Mix. Sign.

#### VARIANT II

##### I. Translate into Latin:

- 1) white mercury ointment
- 2) foxglove leaves powder
- 3) tablets of ascorbic acid with glucose
- 4) castor oil in capsules
- 5) ointment “Boromenthol”

**II. Explain the meaning of Greek and Latin roots in the drug names:**

Chloruritum  
Pentamethazolum

Nitroglycerinum  
Neomycinum

**III. Translate into Latin:**

- 1) Rx: Menthol oily solution 1 % — 40 ml  
Dispense. Sign.
- 

- 2) Rx: Depurated mercury 1,0  
Zinc oxide  
Wheat starch as much of each 2,5  
Vaseline 20,0  
Mix to get ointment.  
Dispense. Sign.
- 

- 3) Rx: Dimedrole suppositories 0,05 No 10  
Dispense. Sign.
- 

- 4) Rx: Sodium tetraborate 5,0  
Glycerine 20 ml  
Mix. Dispense.  
Sign.

**VARIANT III**

**I. Translate into Latin:**

- 1) pyocide in ampules
- 2) composite lead plaster
- 3) oily solution Oxyprogesterone caproate for injections
- 4) coated buckthorn dry extract tablets 0,2
- 5) zinc oxide liniment

**II. Explain the meaning of Greek and Latin roots in the drug names:**

Anaesthsinum

Pipolphenum

Hexaphosphamidum

Hydrocortisonum

**III. Translate into Latin:**

- 1) Rx: 40 Diaphenylsulfone tablets 0,025

Dispense.

Sign.

- 2) Rx: Ephylline 0,1

Ephedrine hydroxide 0,25

Sugar 0,2

Mix let there be made powder.

Dispense such doses in number 12 in ampules.

Sign.

- 3) Rx: Foxglove leaves powder 0,5

Dispense such doses in number 20.

Sign.

- 4) Rx: 20 dragee of Thioridazine

Dispense.

Sign.

**VARIANT IV****I. Translate into Latin:**

- 1) soluble streptocide
- 2) atropine sulfate for suspension
- 3) dry extract of valerian in tablets
- 4) platyphylline hydrotartrate
- 5) zinc paste with wheat starch

**II. Explain the meaning of Greek and Latin roots in the drug names:**

Oxacillinum  
Nitroglycerinum

Papazolum  
Corvaldignum

**III. Translate into Latin:**

1) Rx: Composite liniment of methylsalicylate 50,0  
Dispense. Sign.

---

2) Rx: Fluid extract of aloe 1 ml  
Dispense 12 such doses in ampules  
Sign.

---

3) Rx: Theobromine  
Amidopyrine so much of each 0,025  
Phenobarbitale 0,02  
Dispense such doses in number 12 in tablets  
Sign.

---

4) Rx: Rhubarb syrup 50 ml  
Dispense. Sign.

**VARIANT V**

**I. Translate into Latin:**

- 1) suppositories with diprophylline 0,5
- 2) ascorbic acid 2 %
- 3) dry extract of milfoil
- 4) furaciline ointment
- 5) valerian tincture with menthol

## **II. Explain the meaning of Greek and Latin roots in the drug names:**

Cyclophosphanum	Phenazepamum
Chlotazolum	Thiodipinum

## **III. Translate into Latin:**

1) Rx: Vinyline 20 ml  
Sunflower oil 80 ml  
Mix.  
Dispense.  
Sign.

---

2) Rx: Xeroforme 0,5  
Belladonne extract 0,015  
Cacao oil 3,0  
Mix to form a suppository. Dispense such doses in number 10.  
Sign.

---

3) Rx: Infusion of marshmallow root 10,0 – 200 ml  
Sodium bromide 0,5  
Mix.  
Dispense.  
Sign.

---

4) Rx: Tannalbine 0,3  
Bismuthe subnitrate 0,5  
Mix to form a powder. Dispense such doses in number 5.  
Sign.

## **VARIANT VI**

### **I. Translate into Latin:**

1. lily of valley tincture
2. oily solution of camphor et salicylic acid
3. zinc oxide liniment
4. syrup of aloe with iron
5. rhubarb root tablets

## **II. Explain the meaning of Greek and Latin roots in the drug names:**

Almecillinum

Sulfalenum

Phthorocortum

Bellalaginum

## **III. Translate into Latin:**

- 1) Rx: 10 tablets “Paphyllum”

Dispense.

Sign.

- 
- 2) Rx: Soluble norsulfazole solution 5% – 20 ml

Sterilise! Dispense.

Sign.

- 
- 3) Rx: Milfoil herb infusion 10,0 – 150 ml

Dispense.

Sign.

- 
- 4) Rx: Diluted hydrochloric acid 4 ml

Pepsine 2,0

Simple syrup 30 ml

Mix to form a mixture. Dispense.

Sign.

## **VARIANT VII**

### **I. Translate into Latin:**

- 1) coated tablets of dry valerian extract
- 2) strychnine powder
- 3) spirituous solution of boric acid
- 4) wheat starch with zinc oxide
- 5) infusion of nettle leaves

## **II. Explain the meaning of Greek and Latin roots in the drug names:**

Norsulfazolum	Anapyrinum
Aminazinum	Phosphacolum

## **III. Translate into Latin:**

1) Rx: Depurated sulphur  
Magnium oxide  
Sugar so much of each for 10,0  
Mix to form a powder.  
Dispense.  
Sign.

---

2) Rx: Hexamethylentetramine 0,25  
Belladonna dry extract 0,015  
Mix. Dispense such doses in number 10 in tablets.  
Sign.

---

3) Rx: Griseofulvine suspension 100,0  
Dispense.  
Sign.

---

4) Rx: Yellow mercury oxide 0,6  
Ichthyole 0,8  
Zinc ointment 20,0  
Mix.  
Dispense.  
Sign.

## VARIANT VIII

### I. Translate into Latin:

- 1) oily solution of camphor et salicylic acid
- 2) zinc oxide liniment
- 3) syrup of aloe with iron
- 4) ophthalmic ointment of hydrocortisone
- 5) sage oil for inhalation

### II. Explain the meaning of Greek and Latin roots in the drug names:

Thiophenum	Oxytocinum
Lincomycinum	Cortisonum

### III. Translate into Latin:

- 1) Rx: Castor oil emulsion 100 ml

Dispense.

Sign.

- 
- 2) Rx: Xeroforme ointment 50,0

Dispense in black bottle.

Sign.

- 
- 3) Rx: Menthol 0,1

Phenylsalicylate 0,3

Vaseline oil 9,0

Mix. Dispense.

Sign.

- 
- 4) Rx: Dry extract of aloe

Rhubarb root powder so much of each for 0,1

Dry extract of belladonna 0,015

Mix to form a powder.

Dispense.

Sign.

## VARIANT IX

### I. Translate into Latin:

- 1) castor oil emulsion in bottle
- 2) suppositories with belladonna extract
- 3) peppermint water
- 4) flowers decoction
- 5) depurated sulphur

### II. Explain the meaning of Greek and Latin roots in the drug names:

Streptoliasum	Thioridazinum
Phenazepamum	Lidasum

### III. Translate into Latin:

- 1) Rx: St. John's wort herb infusion 10,0 – 150 ml

Dispense.

Sign.

- 
- 2) Rx: Dibazole 0,03

Theobromine 0,25

Platiphylline hydrotatrate 0,003

Mix. Dispense such doses in number 12 in tablets.

Sign.

- 
- 3) Rx: 20 tablets of tetracycline with nystatine

Dispense.

Sign.

- 
- 4) Rx: Sodium benzoate 0,6

Marshmallow syrup 25 ml

Distilled water up to 60 ml

Mix to form a mixture.

Dispense.

Sign.

## VARIANT X

### I. Translate into Latin:

- 1) root valeriane root infusion in dark bottle
- 2) acid copper sulphate solution
- 3) composed lead plaster
- 4) decoction of birch buds (*Betula, aef*)
- 5) powder with wheat starch

### II. Explain the meaning of Greek and Latin roots in the drug names:

Angiographinum	Norsulfazolum
Ampicillinum	Syngestronum

### III. Translate into Latin:

- 1) Rx: Dry aloe extract

Powder of rhubarb root so much of each for 0,1  
Dry extract of belladonna 0,015  
Mix to form a powder. Dispense such doses in number 20.  
Sign.

- 
- 2) Rx: Ichthyole 10,0

Salicylic acid 5,0  
Lanoline 100,0  
Mix to form an ointment.  
Dispense.  
Sign.

- 
- 3) Rx: Silver nitrate 0,12

Distilled water 200 ml  
Dispense in dark bottle.  
Sign.

- 
- 4) Rx: Lead water 200 ml

Dispense.  
Sign.

*Practical skills. Quiz “Clinical Terminology”*

**VARIANT I**

**I. Translate clinical terms into English:**

1. insufficientia circulationis sanguinis chronica
2. forma infarctus myocardii dolorosa
3. stenosis ostii aortalis
4. morbus congenitus

**II. Make up the terms with the given meaning:**

1. kidney stone formation, stone in the lacrimal sac, water presence in thorax
2. more than normal level of glucose in blood, less than normal kalium level in blood
3. fear of: men, water, light, red colour, yellow colour
4. breast ptosis, vagine fixation

**III. Translate and explain the terms:**

dysmnesia  
paraphrenia  
splenomegalia  
melanoma  
barometria

**IV. Translate clinical diagnoses into Latin:**

1. pulsation of the neck veins
2. diffuse toxic goiter
3. superficial palpation of the abdomen
4. diabetic, alcoholic coma
5. purulent peritonitis

## **VARIANT II**

**I. Translate clinical terms into English:**

1. pyorrhoea alveolaris
2. rhinitis atrophica anterior
3. morbus hypertonicus medicamentosus
4. necrosis renum bilateralis

**II. Make up the terms with the given meaning:**

1. absence of: foot, hand, spleen, tooth, nails, milk
2. pain of rectum, stomach, heart
3. cancer of: breast, kidney
4. narrowing of ureter, distention of bronch

**III. Translate and explain the terms:**

leucocytosis  
trichoclasia  
arthrodesis  
dysphagia  
agnosia

**IV. Translate clinical diagnoses into Latin:**

1. acute haematogenous pyelonephritis
2. hepatic coma, diabetic coma
3. neuropathy of optical nerve
4. chronic empyema of pleura
5. diffuse sclerosis of myocardium

## VARIANT III

**I. Translate clinical terms into English:**

1. paralysia nervi fasialis congenita
2. asthma bronchiale
3. encephalomalacia traumatica
4. cancer inoperabilis

**II. Make up the terms with the given meaning:**

1. treatment by means of: water, drugs, air; treatment of: soul, old men, children
2. abnormal speedy: breath, heart beating; abnormal slow breathing
3. inclination to: spasms, new, dead, blood
4. suturing of: hernia, uterine tube, caecum, vessel

**III. Translate and explain the terms:**

lipodystrophia  
hyperosmia  
xeroglossia  
histolysis  
myectomy

**IV. Translate clinical diagnoses into Latin:**

1. chronic osteomyelitis of the upper jaw
2. toxic erythema
3. malignant nephrosclerosis
4. internal abdominal hernia
5. embryonal fibroma

## VARIANT IV

**I. Translate clinical terms into English:**

1. empyema pleurae postpneumonicum
2. necrolysis epidermalis toxica
3. angiopathia retinae hypertonica
4. pyodermia profunda

**II. Make up the terms with the given:**

1. excision of: womb, ovary, testicle, lacrimal sac, urinary bladder
2. pain in: tongue, head, nose, ear, eye
3. white: skin, nail; black: urine, tumour, tooth
4. narrowing of: ureter, common bile tract

**III. Translate and explain the terms:**

trichoclasia  
gerodermia  
pseudopodalgia  
autopyotherapy  
phonopaedia

**IV. Translate clinical diagnoses into Latin:**

1. embrional cancer
2. anterior atrophic rhinitis
3. angioneurotic oedema
4. acute yellow atrophy of liver
5. atherosclerosis of coronoideal artery

## VARIANT V

**I. Translate clinical terms into English:**

1. resectio gastris pyloroantralis
2. abscessus hepatis cholangiogenus
3. adenoma corticis glandulae suprarenalis
4. angiokeratoma corporis diffusum

**II. Make up the terms with the given meaning:**

1. ptosis of: eyelid, kidney, internal organs, breast, vagine
2. pathology of: articulations, bones, womb, cerebrum
3. inflammation: around vein, eye, a lot of articulations, near womb
4. more than normal quantity of leucocytes, less than normal thrombocytes quantity

**III. Translate and explain the terms:**

anophthalmia  
pleurodynia  
orchiectomia  
cheiloschisis  
stenocardia

**IV. Translate clinical diagnoses into Latin:**

1. acute necrosis of pancreas
2. blood sedimentation
3. arteriovenous angioma
4. emboly of pulmonal artery
5. intercostal neuralgy

## VARIANT VI

**I. Translate clinical terms into English:**

1. leucoderma medicamentosum
2. atrophia musculorum chronica
3. fractura intraarticularis
4. haematoma medullae spinalis

**II. Make up the terms with the given meaning:**

1. small size of: upper jaw, low jaw, head, spleen, foot
2. section of: abdomen, chest, trachea, gallbladder, knee articulation
3. measurement of: head, body, atmospheric pressure
4. inflammation of: all the eye, near ear, around tooth

**III. Translate and explain the terms:**

allokeratoplastica  
dyschromatopsia  
glossoptosis  
acromegalia  
cryopexia

**IV. Translate clinical diagnoses into Latin:**

1. chronic lateral myosclerosis
2. pyloroantral resection of stomach
3. traumatic keratitis of the right eye
4. simple squamous blephariitis
5. glycogenous dystrophy of liver

## **VARIANT VII**

**I. Translate clinical terms into English:**

1. extirpation of uterus supravaginalis
2. tuberculosis pulmonum cavernosa
3. sanatio cavitatis oris
4. oedema cerebri acutum

**II. Make up the terms with the given meaning:**

1. rupture of: heart, spleen, vessel, uterus neck
2. suturing of: vein, trachea, vagine
3. absence of: kidney, thyroid gland, ovary
4. headache, pain in urinary bladder, pain of lumbus

**III. Translate and explain the terms:**

nephrolithus  
oligopnoë  
bradysphygmia  
cardiotachometria  
osteogenus

**IV. Translate clinical diagnoses into Latin:**

1. spermatogenous granuloma
2. hernia of the abdomen linea alba
3. abdominal caesarian section
4. grippous angina
5. thrombosis of the left leg veins

## VARIANT VIII

**I. Translate clinical terms into English:**

1. separatio placentae manualis
2. ulcus vulvae acutum
3. trichorrhesis nodosa
4. anaemia splenica infantilis

**II. Make up the terms with the given meaning:**

1. fixation of: lung, womb, kidney, vagine
2. pathological inclination to: children, oldmen, women, men, warmth, coldness
3. incision of dead (body); milk hernia; stomach pain; formation of glycogen
4. keratosis of skin; white nails; green lips; short head

**III. Translate and explain the terms:**

syphylophobia  
anisocoria  
catamnesis  
endophlebitis  
ascaridosis

**IV. Translate clinical diagnoses into Latin:**

1. stenosis of aorta ostium
2. putrid bronchitis
3. plastic surgery
4. uterine chloasma
5. acute liver dystrophy

## **VARIANT IX**

### **I. Translate clinical terms into English:**

1. periostitis odontogena acuta
2. necrosis hepatis toxica
3. tachycardia ventriculi sinistri
4. keratoplastica cosmetica

### **II. Make up the terms with the given meaning:**

1. stagnation of: excrements, bile, blood, urine, spittle
2. tumour of: embryo, lard, muscle; white tumour
3. instrumental examination of: womb, urinary bladder, rectum, ear, throat
4. absence of: head, heart, kidney, strength, milk, voice, vision

### **III. Translate and explain the terms:**

hepatosis  
angiographia  
omphalectomia  
carcinomatosis  
hyperkinesia

### **IV. Translate clinical diagnoses into Latin:**

1. aseptic necrosis of the bone
2. neuropathy of the optical nerve
3. skin erythrocyanosis
4. acute haemorrhagic encephalitis
5. pseudoerosion of the uterus neck

## VARIANT X

**I. Translate clinical terms into English:**

1. agangliosis coli congenita
2. aplasia medullae ossium
3. mastopathia thyreotoxic
4. melancholia senilis maligna

**II. Make up the terms with the given meaning:**

1. making a fistule on: colon, kidney, uterine tube, caecum, rectum
2. dilatation of: vein, bronch, stomach
3. abnormally slow: breathing, moving, heartbeating, pulse, swallowing
4. green tumour, black tumour, white tumour, yellow tumour, lard tumour

**III. Translate and explain the terms:**

- hyperglykaemia  
bronchocele  
proctalgia  
rhachitis  
autopsia

**IV. Translate clinical diagnoses into Latin:**

1. oesophagenous abscess of the cerebrum
2. hypertonic angiopathy of the retina
3. trophic ulcer of the left leg
4. adiposous infiltration of liver
5. homolateral necrosis of the kidney

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