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TRAINING MATERIALS FOR TEACHERS FOR THE DISCIPLINE

“LATIN FOR FOREIGN STUDENTS”

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Anatomical Terminology

Topic 1

The Latin alphabet. Phonetics. Reading rules. Stress.

ANATOMICAL TERMINOLOGY

THE LATIN ALPHABET

There are 25 letters in the Latin alphabet:

Letter	Name	Pronunciation	Examples – Latin (English)
Aa	a	a	as in “under”: cáput (head)
Bb	be	b	as in “bath”: bráchium (shoulder)
Cc	tse	ts k	as in “plants”: cérvix (neck) as in “coner”: cósta (rib), crísta (crest)
Dd	de	d	as in “danger”: déxter (right)
Ee	e	e	as in “met”: vértebra
Ff	ef	f	as in “fast”: fácies (surface, face)
Gg	ge	g	as in “get”: gáster (stomach)
Hh	ha	h (english like)	as in “hand”: hómo (man)
Ii	I	i	as in “sit”: vagína (vagina)
Jj	yot	(j)	as in “yes”: májor (large)
Kk	ka	k	as in “key”: skéleton
Ll	el	l	as in “life”: lábium (lip)
Mm	em	m	as in “medical”: meátus (passage)
Nn	en	n	as in “night”: násus (nose)
Oo	o	o	as in “spot”: córpus (body)
Pp	pe	p	as in “palmer”: pálpebra (eyelid)

Qq	ku	k	as in “quite”: quádriceps (four-headed)
Rr	er	r	as in “rend”: ren (kidney)
Ss	es	s z	as in “solve”: solútio (solution) as in “nose”: incisúra (slit or notch)
Tt	te	t	as in “ten”: tráctus (tract)
Uu	u	u	as in “put”: púlmo (lung)
Vv	ve	v	as in “van”: válva (valve)
Xx	iks	ks	as in “next”: rádix (root)
Yy	ypsilón (igrek)	i	as in “crystal”: týmpanum (drum)
Zz	zeta	z	as in “zero”: zygóma (check-bone)

The Classification of the Sounds

The letters **a, e, o, u, i, y** are vowels;

The letters **b, c, d, f, g, h, j, k, l, m, n, p, q, r, s, t, v, x, z** are consonants.

The vowels are subdivided into **monophthongs** and **diphthons**

Diphthongs

A diphthong is a combination of two vowels pronounced like one sound or one syllable. There are four diphthongs in the Latin language:
ae, oe, au, eu, the first two of which are pronounced like one sound.

The diphthong **ae** is pronounced like [e]

e. g. peritonaéum [peritonéum]

vértebrae [vértrebre]

The diphthong **oe** is pronounced like the English [e :]

e. g. oedéma [edéma]

oesóphagus [ezófagus]

For separate reading of vowels of the mentioned above diphthongs, in case they belong to different syllables, the demarcation mark («) is used:

e. g. díploë [díploe] (spongiuous substance of flat bones)

áër [áer] (air)

The diphthong au is pronounced like the English [‘au]

e. g. áuris [auris] (ear)

The diphthong eu is pronounced like the English [eu]

e. g. pneumonía [pneumonia]

The pronunciation of the consonants

Cc - [ts] - before the sounds [e], [i], expressed through e, ae, oe, i, y.

- [k] - before consonants,

- before vowels **a,o,u**

Exercise

Read the words. Explain the pronunciation of the letter c:

Medicína, cérebrum, cylíndricus, coélia, caécus, coróna, cáncer, acútus, dúctus, sic, cránum, sácer, vértebra coccygéa, córnú coccygéum, fáscia cervicális, dúctus hepáticus commúnis, fascículus cuneátus, crísta seu pécten.

**Hh is pronounced like a sound intermediate between the English
[h] and [g]**

e. g. **hómo** [(g)homo] (a human being)

hiátus [(g)hiatus] (an aperture, opening or foramen)

Ll is pronounced very softly,

e. g. **lábium** [l'abium]

(lip) **pelvínus** [pel'vinus]

**Ss - [s] – in most cases, i. e. at the beginning and at the end of words, before
consonants and vowels;**

- [z] - between two vowels; between a vowel and consonants m, n, r, l

Exercise:

Read the words paying attention to the pronunciation of the letter “s”:

Búrsa, cápsula, os, músculus, discus, adipósus, fibrósus, compósitus, pulpósus, exténsio,transitórius, os sácrum, básis óssis sácri, procéssus supérior, transvérsus, ánsér, tuberósitas, cápsula fibrósa, fossa incisíva.

Zz - [z] – in the words of Greek origin

-[ts] – in the words borrowed from modern languages for

example: **Zíncum** [tsinkum] (German)

influéntza [influenta] (Spanish)

Qq – is always used in the combination with letter u and is pronounced like [kw]

e. g. **squáma** [skwama]

quadrátus [kwadrat ngu]

ngu - [ngu] – before consonants

- [ngv] - before vowels

e. g. **língua** [lingva], **sánguis** [sangvis],

but **língula** [lingula], **ángulus** [angulus]

ti- + vowel – [tsi]

+ consonant – [ti], but after s, x before vowels - [ti]

e. g. **articulátio** [artikulatsio]

eminéntia [eminentsia]

but: óstium [ostium]

míxtio [mikstio]

Greek combinations of consonants – digraphs **ch**

– is pronounced like [kh], e. g. núcha [nukha]

ph – is pronounced like [f], e. g. xiphoídeus [ksifoideus]

rh – is pronounced like [r], e. g. rháphe [rafe]

th – is pronounced like [t], e. g. thorax [toraks]

The combination of consonants **sch** is pronounced like [skh]

e. g. íschium [ishium]

Exercise:

Read the terms paying attention to the pronunciation:

Embryológia, histológia, ócciput, viscera, zygóma, Zincum, máximus, fléxio, sacrum, basis óssis sácri, coccyx, colúmna, tubérculum, cartilágo, músculus, grácilis, óssa, tuberósitas, subscapuláris, transversárius, cáudam, aër, dysphnóë, oedéma, líneae transversae, oblíquus, unguis, articulátio, inaequális, linguláris, aërátio, schema, phárynx, ánthropos, thyreoídeus, circumductio, rháphe.

TASKS FOR CONTROL

I. Answer the questions:

1. What is a term?
2. What is the function of a definition?
3. What is "terminology"?
4. What peculiarities does the modern language of physicians have?
5. What systems of terms are included into the medical terminology?
6. What scientists made contribution into the development of the international medical terminology?

II. Fill in the blanks:

1. In Latin the sound [e] is expressed through the vowel "e" and the diphtongs.
2. At the beginning of a word before a vowel or between two vowels the letter " ..." or the letter "j" is used to denote the sound [j].
3. The sound [k] is mostly expressed through the letter ...

4. "C" is pronounced like [ts] only before the two vowel-sounds:...
5. In the term "caput costae" the letter "c" is read like ...
6. In the word "spatium" the combination of letters "ti" is read like ...
7. The combination of sounds [kw] is expressed through the letters ...
8. The sound [f] is expressed either through the letter ... or the digraph ...
9. "S" between vowels is read like ...
10. The combination of letters "ngu" before vowels is pronounced like ...

EXERCISES

I. Read the terms, explain the pronunciation of vowels and consonants:

Anatómia, embryológia, histológia, cytológia, homo sapiens, caput, vertex, occiput, collum, truncus, dorsum, abdomen, viscera, pes, crus, femur, manus, palma, corpus, costae, vertebrae; foramen vertebrale, incisurae vertebrales, processus spinosus, sacer, sacra, sacrum, basis ossis sacri, tuberculum anterius, arcus posterior, coccygeus, vertebrae coccygeae, pediculus arcus vertebrae.

2. Read the terms:

Línea dorsalis fixus
 Massa medius humidus
 Dens hiatus trapézium
 Fovea tuberositas interspinális
 Apex intervertebrális conjungere
 Pars hepar jacere
 Spinosus cervix iuxta
 Foramen transversus Zoológia
 Superior radix tuberculum majus
 Dentes prominens circulus maior

3. Read and explain the pronunciation of diphthongs:

Costae verae caecus, caeca, caecum
 Costae spuriae auricula
 Aegrotus aponeurosis
 Aegrotus oedema
 Incisurae costales aeger
 Foveae costales inaequalis

líneae transversae junctúrae cartilagíneae
 álae sácri coelíacae
cellúlae mastoídeae dýspnoë
semicanális **túbæ auditívæ**
 aërátio

4. Write out the words in which the combinations of letters "qu" and "ngu" are pronounced correspondingly like [kw] and [ngv]:

**1. Aquaeductus 2. língua 3. ángulus mandíbulae 4. squáma 5. quadrátus
6. fóvea sublinguális 7. pars squamósa 8. únguis 9. trianguláris 10. inaequális
11. línea oblíqua 12. sánguis 13. fréquens 14. Linguláris 15. inguinális 16. úngula**

ACCENTUATION (STRESS)

In the Latin language the stress is dynamic, that is, the syllable under stress is pronounced with a greater force of voice. The last syllable is never stressed. The second or third from the end syllable is under stress which depends on whether the second from the end syllable is short or long.

If it is long, then it is under stress, if not – the stress shifts to the previous syllable. So, one must know, which syllable is short and which is long to correctly put stress on it.

The syllable is considered long if:

1. it contains a diphthong:

e. g. glu-taé-us (glutaeus) – pertaining to buttock
o-zaén-a (ozaena) - bad cold in the head

2. the vowel of the second from the end syllable is followed by two consonants, by "x" or "z" :

e. g. pro-céss-us (processus) – process

re-fléx-us (reflexus) –reflex

The syllable is short if:

1. the vowel of the second from the end syllable is followed by another vowel :

e. g. lí-ne-a (linea) – line
an-té-ri-or (anterior)

2. the vowel of the second from the end syllable is followed by the combination of

pál-pebr-a

e. g. tým-păn-um, but mem-brăn-a

N. B! = Nota bene = Pay attention!

Long suffixes:

incisura, fissura, natura, fractura, aperture;

oblongatus digitatus, medicatus;

tuberosus, squamosus, fibrosus, petrosus,

spinosus ;

incisivus, conjunctivus, progressivus, auditivus;

pelvinus, anserinus, equinus; āl(is,e) -

Engl. – al

costalis, temporalis, lacrimalis, lateralis;

ār(is, e) - Engl. — ar; -ary; -al

angularis, articularis, clavicularis, maxillaris.

-ĩc(us,a,um) (adj.) - Engl. – ic

-ül- (noun) – Engl. – ule; -cle

-cŭl- e. g. angulus, musculus, pediculus, clavicula,

capsula;

-öl- e. g. alveolus, foveola.

EXERCISES:

I. Put stresses and explain:

Incisura lineae columnae, angulus processus xiphoideus, costale facies mandibularis, clavicula petrosus appendix, tuberculum dorsalis depressor, fovea cerebri connexus, crista apertura ligamentum laterale, jugularis eminentia tuberculum costae, posterior spatium spatia intercostalia, articularis palpebra costae spuriae

3. Read the terms, minding the stress; memorize the terms:

- | | |
|--------------------------|--|
| 1. caput – head | 9. facies – face, surface |
| 2. cranium – skull | 10. tuberculum – tubercle |
| 3. clavicula – clavicle | 11. dexter, dextra, dextrum – right |
| 4. maxilla – upper jaw | 12. sinister, sinistra, sinistrum – left |
| 5. mandibula – lower jaw | 13. major, majus – major, greater |
| 6. articulatio – joint | 14. minor, minus – minor, lesser |
| 7. costa – rib | 15. medianus(a)um – in the middle of |
| 8. musculus – muscle | 16. profundus(a)um – deep, profound |

Topic 2

**Grammar. Morphological elements of noun
Grammatical categories. Declension. Gender.
Dictionary form of a noun. Structure of anatomical
term. Uncoordinated attribute.**

Tasks for Control:

Answer the questions:

1. What syllable is usually stressed in a Latin word?
2. Say, when the vowel is long. Give examples.
3. Say, when the vowel is short. Give examples.

Put stress in the following words. Give the necessary explanation:

1. transversus
2. externus
3. xiphoideus
4. pterygoideus
5. vertebra thoracica
6. glandula ciliaris
7. incisura angularis
8. canalis opticus
9. facies superior
10. fovea trochlearis

Give Latin equivalents to the following words:

1. mandible
2. tubercle
3. head
4. rib
5. articulation
6. muscle
7. right
8. left
9. face
10. clavicle

THE STRUCTURE OF AN ANATOMICAL TERM

We are going to study basics of the Latin Grammar on the basis of the Anatomical Terminology.

The aim is to be able to analyze the terms from the point of view of their structure, to construct Latin terms in accordance with the rules of the Latin Grammar.

The **anatomical term** is a word used to name a definite unit or structure of a human body. Anatomical terms may consist of one, two, three, four and more words (up to 8).

One-Word Terms

They consist of one noun in singular or plural:

Costa (rib), costae (ribs)

Two-Word Terms

They may consist of:

a. two nouns in singular or plural: *corpus vertebrae (body of vertebra), corpōra vertebrārum (bodies of vertebrae)*

b. a noun with an adjective: *vertebra thoracica (thoracic vertebra)*

Three-Word Terms

They may consist of:

a. three nouns: *ligamentum tubercūli costae (ligament of tubercle of rib)*

b. a noun and two adjectives: *processus articulāris superior (superior articular process)*

c. two nouns and an adjective: *sulcus nervi spinālis (furrow of the spinal nerve)*

Multiword Terms

They may consist of several nouns and adjectives in singular and plural:

Facies temporālis alae minōris ossis sphenoidālis (temporal surface of the smaller wing of the sphenoid bone).

NOUN

A noun is characterized by the following grammar categories:

The grammatical categories of a noun are as follows:

1. Gender
2. Number
3. Case
4. Declension

There are three genders in Latin: masculine (masculīnum), feminine (feminīnum) and neuter (neutrum). In contrast to Latin English nouns have only a natural gender, i.e. according to their sex: nouns designating males are masculine (man, boy), nouns designating females are feminine (woman, girl), and nouns designating inanimates are in the neuter gender.

Latin nouns have grammatical gender. Their gender is determined by the ending of Nominative singular.

Thus, nouns ending in **-a** are feminine: scapūla (shoulder blade), nouns ending in **-us** are masculine: musculus (muscle), nouns ending in **-um** are neuter etc.

The genders of a noun are indicated in the dictionaries with the letters:

· m - masculine
· f - feminine
· n – neuter

NUMBER

In common with English there are two numbers in Latin - **singular**(singulāris) and **plural**(plurālis). Number is the grammatical category showing whether we speak of one thing or more than one. In English the plural is formed by the endings –s or –es. In Latin the ending of the plural varies according to the gender and declension:

Vertēbrae (vertebrae), nervi (nerves), corpōra (bodies), faciēs (surfaces) etc.

CASE

Case is defined as the change of the noun form according to its relation to other words. In modern English we can speak about “common case” and “possessive case”. In contrast to English there are six cases in Latin, but only **two cases** are used in the anatomical terminology:

English	Latin and abbreviation
Nominative	Nominatīvus (Nom.)
Genitive	Genetīvus (Gen.)

Nominative indicates the subject and answers the questions **who, what.**

Genitive indicates the possession and answers the questions **whose, of what.**

Dictionary Form:

You should learn Latin nouns in their “**Dictionary Form**”. The dictionary form of a noun consists of **three components**:

The full form of Nominative singular;

The Genitive singular ending;

The designation of gender (with the letters m, f, n).

E.g.: ala, ae f -wing;

sternum, i n -breast bone;

ductus, us m -duct.

V. DECLENSION

There are five declensions in Latin; that is, **five categories of nouns**, each with its own endings. The declension is determined by the Genitive singular endings.

First declension

The nouns of **feminine** which end in **-a** are ascribed to the first declension. The Genitive form of the first declension nouns ends in **-ae**.

E.g.: *costa*, ae f *-rib*

vertēbra, ae f *-vertebra*

Second declension

To the second declension are referred **masculines** which end in **–us** and **–er**, and **neuters** which end in **–um**, **–on**. The Genitive form of the second declension nouns ends in **–i**.

E.g.: *nasus*, i m *-nose*;

collum, i n *-neck*;

olecrānon, i n *-tip of the elbow*;

cancer, cri m *-cancer*.

Attention!!! – In the anatomical terminology there are no nouns which end in –er. The ending –on have the following anatomical terms:

- *acromiōn*, i n – *acromial process*
- *colon*, i n – *large intestine*
- *encephālon*, i n – *brain*
- *gangliōn*, i n – *ganglion*
- *olecrānon*, i n *-tip of the elbow*

Third declension

The third declension includes nouns of **all the three genders** which have **different endings** in Nominative singular and **–is** in Genitive singular.

E.g.: *canālis*, is m *-canal*;

regiō, ōnis f *-region*;

os, ossis n *-bone*.

Fourth declension

The fourth declension includes masculines which end in **–us**, and the neuters which end with **–u**. The Genitive singular form of these nouns ends in **–us**.

E.g.: *arcus*, us m *-arch*;

cornu, us n –*horn*.

Attention!!! - In the anatomical terminology there are only two neuters of the 4th declension which end in –u: **cornu, us n** (*horn*), **genu, us n** (*knee*).

Attention!!! -In the anatomical terminology there is only a limited number of masculines of the fourth declension. You should remember some of them as follow

· aqu(a)eductus, us m	<i>aqueduct</i>
· arcus, us m	<i>arch</i>
· ductus, us m	<i>duct</i>
· meātus, us m	<i>tract, passage</i>
· processus, us m	<i>process</i>
· sinus, us m	<i>sinus; hollow</i>
· textus, us m	<i>tissue</i>

Fifth declension

The fifth declension includes nouns of feminine which end in –es in Nominative singular and in -ei in Genitive singular.

E.g.: *faciēs, ei f* –*surface, face* (**this is the only noun of the fifth declension you meet in the exercises**).

VI. STEM OF NOUNS

To make a Genitive form from the Nominative form you should determine the **stem of the noun**. To determine the stem you should detach the ending from the noun:

E.g.:

Dictionary form	Genitive	Stem
crista, ae f	crist - ae	crist -
collum, i n	coll - i	coll -
facies, ēi f	faci - ēi	faci -
pars, partis f	part - is	part -
vomer, ěris m	voměr - is	voměr -
caput, ĩtis n	capĭt - is	capĭt -

VII. Exercises

1. Make up the dictionary form of nouns:

arcus (arch), bulbus (bulb; any rounded mass), concha (concha), incisūra (slit or notch), sulcus (furrow or groove), cornu (horn), nasus (nose), amnion (amnion), tubercŭlum (tubercle; small rounded swelling), scapŭla (shoulder blade), adĭtus (enter), septum (dividing wall), ganglion (nerve node), collum (neck), porus (opening, pore), fossa (shallow depression or cavity), encephălon (brain), colon (part of large intestine), olecrănon (elbow appendix), muscŭlus (muscle), ramus (branch), genu (knee), nodus (node), pleura (membrane lining chest and covering lungs), lingua (tongue; language), sinus (cavity, sinus), orgănon (organ).

2. Determine the declension of the nouns:

facies, ēi f (surface); pars, partis f (part); ala, ae f (wing); magister, tri m (teacher); nervus, i m (nerve); ramus, i m (branch); sphincter, ěris m (sphincter); colon, i n (part of large intestine); plexus, us m (network, chiefly of veins or nerves); forămen, ĩnis n (opening); ligamentum, i n (ligament); dens, dentis m (tooth); tuber, ěris n (thickend portion of underground stem; rounded swelling); tempus, ōris n (temple, time); genu, us n (knee); articulatio, ōnis f (joint); cartilăgo, ĩnis f (cartilage); meniscus, i m (meniscus); diaphragma, ătis n (septum between thorax and abdomen, diaphragm); canălis, is m (canal); cervix, ĩcis f (neck).

3. Pay attention to the word order:

spina scapulae (spine of shoulder bone); *raphe palati* (suture of palate); *skelēton membri* (skeleton of a limb); *ossa cranii* (bones of skull); *fossa glandulae* (cavity of gland); *vena portae* (portal vein); *septum nasi* (dividing wall of nose); *crista tuberculi* (crest of tubercle); *processus radii* (appendix of radial bone); *caput fibulae* (head of fibular bone); *corpus tibiae* (body of shin bone); *facies acromii* (surface of acromion); *linea nuchae* (line of neck nape); *sulcus sinus* (furrow of sinus); *basis cranii* (base of skull); *angulus mandibulae* (angle of lower jaw).

4. Determine the gender of the nouns:

septum (dividing wall); *substantia* (substance, material); *encephalon* (brain); *oculus, i* (eye); *nasus, i* (nose); *scapula* (shoulder blade); *arcus, us* (arch); *acromion* (acromion); *lingua* (tongue, language); *mandibula* (lower jaw); *processus, us* (appendix); *cranium* (skull); *dorsum* (back); *incisura* (slit or notch); *clavicula* (collar-bone); *skelēton* (skeleton); *cornu* (horn); *meatus, us* (passage); *palatum* (palate); *humerus, i* (humeral bone); *lymphā* (lymph); *cerebrum* (brain); *concha* (concha); *maxilla* (upper jaw); *ductus, us* (duct); *olecranon* (elbow appendix); *tuberculum* (tubercle); *lamina* (plate); *ramus, i* (branch); *ganglion* (nerve node); *vertebra* (vertebra; each segment of vertebral column); *sinus, us* (sinus).

5. Pay attention to the word order:

collum costae (scapulae) (neck of rib (shoulder blade)); *corpus fibulae (humeri, maxillae, tibiae)* (head of fibular bone (humeral bone, upper jaw, shin bone)); *incisura mandibulae (scapulae)* (notch of lower jaw (shoulder blade)); *radix dentis (linguae)* (root of tooth (tongue)); *angulus costae (mandibulae)* (angle of rib (lower jaw)).

6. Translate terms into Latin:

muscle of neck; capsule of nerve node; back of saddle; tuber of upper jaw; body of vertebra, head of rib; arch of aorta; notch of lower jaw; base of skull; cavity of nose; passage of nose; neck of shoulder blade; sheath of process; aperture of cochlear canaliculus; crest of the costal head; canaliculus (small canal) of chorda tympani; ligament of the costal tubercle; plate of arch (of vertebra); wing of cock's crest; aperture of aqueduct of vestibule; vestibule of nose; dividing wall of nose; base of cochlea; small pit of process; small foot of arch of vertebra; surface of the costal tubercle.

MEMORIZE THE TERMS

1st Declension

1. ala, ae f – wing
2. aorta, ae f – aorta
3. arteria, ae f – artery
4. costa, ae f – rib
5. concha, ae f – shell
6. lamina, ae f – plate
7. crista, ae f – crest, ridge
8. lingua, ae f – tongue, language
9. mandibula, ae f – mandible, lower jaw
10. maxilla, ae f – maxilla, upper jaw
11. scapula, ae f – scapula
12. spina, ae f – spine, a thorn, backbone
13. patella, ae f – patella, knee cup
14. sutura, ae f – suture
15. tibia, ae f – tibia
16. fibula, ae f – fibula
17. incisura, ae f –

2nd Declension

1. angulus, i m – angle
2. digitus, i m – finger
3. cavum, i n – cavity, channel
4. humerus, i m – humerus
5. cranium, i n – skull
6. radius, i m – radius
7. ligamentum, i n – ligament
8. membrum, i n – extremity, limb
9. musculus, i m – muscle
10. nasus, i m – nose
11. septum, i n – septum, partition
12. collum, i n – neck, neck like
13. sulcus, i m – sulcus, groove; portion of an organ
14. tuberculum, i n – tubercle

3rd Declension

1. corpus, oris n – body
2. foramen, inis n – foramen; an aperture or perforation; opening
3. os, ossis n – bone
4. tuber, eris n – tuber; protuberance, eminence
5. caput, itis n – head
6. basis, is f – base
7. canalis, is m – canal; some tubular structure
8. dens, dentis m - tooth

4th Declension

1. arcus, us m – arc – part of the circumference of a circle or a structure resembling it;
2. cornu, us n – horn
3. genu, us n – knee
4. ductus, us m – duct; canal, a tubular structure,
5. meatus, us m – a passage (as for air) or channel
6. processus, us m – process, a projection or outgrowth
7. sinus, us m – sinus; cavity, channel

5th Declension

facies, ei f – face, surface

MEMORIZE LATIN PROVERBS AND PROFESSIONAL SAYINGS:

1. **Non est medicina sine lingua Latina – There is no medicine without the Latin language.**
2. **Habitus aegroti – The physical characteristics of a patient**
3. **Lapsus linguae – The slip of the tongue**
4. **Lapsus memoriae – Absent-mindedness; (error of memory)**
5. **Modus vivendi – The mode of life**

Topic 3

**Adjective. Grammatical
categories. Declination. Dictionary form. Two groups of
adjectives. Coordination - the kind of subordinate
connection. "**

TEMA: «Adjective. Grammatical categories. Declination. Dictionary form. Two groups of adjectives. Syntax of the noun phrase: coordination - the kind of subordinate connection. »

The aim of the lesson:

To form new theoretical knowledge in the subject

To form practical abilities on finding the information on the given subject.

To form practical abilities on work with scientific and popular scientific literature.

Concrete tasks:

A student should know:

1. Grammatical categories of Noun.
2. Grammatical categories of Adjectives.
3. The dictionary form of Noun and Adjectives.
4. Grammatical agreement of adjectives with nouns.

A student should be able:

1. To form dictionary form of adjectives with endings –us and -is.
2. Coordinate adjectives with nouns in Nom. sing and Gen. Sing.
3. To translate the terms from Latin into Russian and from Russian into Latin with coordinated attributes.

Questions for defining the initial level:

1. What grammatical categories does the Latin noun have?
2. How to define the stem of a noun?
3. How many declinations are in Latin?
4. How to define the declinations of a noun?
5. Name the signs of the declination of a noun
6. What kind of attribute is called coordinated?
7. How is an adjective coordinated with a noun?

The content

**Adjective. Grammatical categories. Declination. Dictionary form.
Two groups of adjectives.**

**Adjective is a word expressing a quality of a thing: major (*large*),
longus (*long*), frontalis (*frontal*).**

In all Latin terms **the position of adjectives is after the noun** with which it has grammatical agreement.

According to their endings all Latin adjectives can be divided into two groups: the first and the second group.

II. THE 1ST GROUP OF ADJECTIVES

The adjectives of the 1st group have different forms for every gender:

	Masculine	Feminine	Neuter
Nominative	long<u>us</u>	long<u>a</u>	long<u>um</u>
Genitive	long<u>i</u>	long<u>ae</u>	long<u>i</u>

These adjectives are declined on the pattern of the 1st and 2nd declensions. They have identical Nominative and Genitive forms with nouns: masculine—us (-i), feminine —a (-ae), neuter —um (-i).

Their dictionary form consists of **three components**:

1. **Adjective in the masculine form;**
2. **The feminine ending;**
3. **The neuter ending.**

E.g.: transversus, a, um (transverse); internus, a, um (internal); profundus, a, um (profound).

The stem of the 1st group adjectives is obtained from the Nominative form by removing the gender ending:

- **longus** **stem: long-**
- **transversum** **stem: transvers-**
- **externa** **stem: extern-**

The adjectives ending in **—er** fall also into this adjective group. In the anatomical terminology only some of them are used:

Masculine	Feminine	Neuter	Dictionary Form	English
dexter	dextra	dextrum	dexter, tra, trum	right
sinister	sinistra	sinistrum	sinister, tra, trum	left
liber	libēra	libērum	liber, ěra, ěrum	free
ruber	rubra	rubrum	ruber, bra, brum	red

As for **the stem** of adjectives with the **ending - er** in masculine it is obtained from the Nominative form by removing the feminine ending.

Dictionary Form	Feminine	Stem
dexter, tra, trum	dextra	dextr-
sinister, tra, trum	sinistra	sinistr-

ruber, bra, brum	rubra	rubr-
liber, ěra, ěrum	liběra	liber-

III. THE 2ND GROUP OF ADJECTIVES

The adjectives of the 3rd declension fall into this group. The adjectives of the 2nd group are the adjectives of the **frontālis** type:

	Masculine	Feminine	Neuter
Nominative	frontālis	frontālis	frontāle
Genitive	frontālis		

As indicated in the table the adjectives of this group have identical Nominative masculine and feminine forms ending in –is and the neuter ending–e. The Genitive form is identical for all genders.

Their dictionary form consists of **two components**:

1. The common masculine and feminine Nominative form;
2. The neuter ending –e.

E.g: **frontālis, e (frontal); cervicālis, e (cervical).**

The stem of the 2nd group adjectives is obtained from the Nominative form by removing the gender ending:

- | | |
|---------------|---------------------|
| • vertebrālis | stem:
vertebrāl- |
| • temporālis | stem:
temporāl- |

IV. THE 2ND GROUP ADJECTIVES OF ONE FORM FOR ALL GENDERS

In the anatomical terminology some adjectives of one form for all genders are used. In the dictionary form of such adjectives the Nominative form (common for all genders) is first indicated, and then the Genitive ending with the stem part.

Remember these adjectives:

- **simplex, ĭcis** *simple*
- **multiplex, ĭcis** *multiple*
- **teres, ĕtis** *round*

The stem of such adjectives is obtained from the Genitive form singular by removing the ending.

Dictionary form	Gen. Singular	Stem
simplex, ĭcis	simplĭcis	simplĭc-
multiplex, ĭcis	multiplĭcis	multiplĭc-
teres, ĕtis	terĕtis	terĕt-

V. AGREEMENT OF ADJECTIVES AND NOUNS

To agree a noun and an adjective means to use them in the same Gender, Number and Case.

To agree a noun and an adjective you should:

1. Determine gender, number and case of the noun;
2. Determine group of the adjective by its dictionary form;
3. Agree the adjective and the noun by gender, number and case.

For example, you translate from English into Latin the following anatomical terms: *mastoid process*, *vertebral foramen*.

- *Process* – *processus*: gender - masculine, singular, Nominative. *Mastoid* – *mastoidĕus*, *a*, *um*: adjective of the 1st group. We agree the adjective *mastoidĕus* in the masculine gender, singular number, Nominative case: **processus mastoidĕus**.
- *Foramen* – *forāmen*: neuter, singular, Nominative. *Vertebral* – *vertebrālis*, *e*: adjective of the 2nd group. We agree the adjective *vertebrālis* in the neuter gender, singular number, Nominative case: **foramen vertebrāle**.

VI. EXERCISES

1. Translate the following terms into Latin according to grammatical agreement:

pharyngeal network; deep cervical lymphatic node; oval opening; thoracic fascia; transverse palatine raphe; stony branch; internal capsule; middle temporal artery; spinous opening; parietal lobe; superficial vein.

2. Translate the following terms into Latin according to grammatical agreement:

articular process of vertebra; bony septum of nose; palatine process of upper jaw; valve of coronary sinus; middle fossa of skull; left lumbar trunk.

3. Translate the following terms into Latin according to grammatical agreement:

ligament of vertebral column; fibrous capsule of thyroid gland; furrow (groove) of occipital artery; aperture of frontal sinus.

4. Translate the following terms into Latin according to grammatical agreement:

pulmonary surface; lateral ligament; right plate; palatine process; vertebral ganglion (nerve node); costal arch; frontal crest; occipital angle; medial head;

sacral canal; superficial vein; simple joint; medial root; costal surface; arched (arch-shaped) crest.

5. Make up grammatical agreement of the following adjectives with the given nouns:

1 sulcus, i m
ligamentum, i n
linea, ae f

transversus, a, um

2 sulcus, i m os, ossis n processus, us m	palatīnus, a, um
3 sutūra, ae f angūlus, i m tuber, ěris n	frontālis, e
4 valvūla, ae f plexus, us m sinus, us m	venōsus, a, um
5 processus, us m facies, ěi f tubercūlum, i n	articulāris, e
6 muscūlus, i m fossa, ae f	pterygoidĕus, a um
7 arcus, us m os, ossis n	zygomatīcus, a, um
8 facies, ěi f ganglion, i n	internus, a, um

6. Make up Genitive forms of the following adjectives:

- | | |
|------------------------|----------------------|
| 1. cervicālis, e | 7. thoracīcus, a, um |
| 2. internus, a, um | 8. medius, a, um |
| 3. sinister, tra, trum | 9. lumbālis, e |
| 4. simplex, ěis | 10. laterālis, e |
| 5. osseus, a, um | 11. temporālis, e |
| 6. lymphatīcus, a, um | 12. vertebrālis, e |

VII. VOCABULARY

1st group of adjectives

- | | | |
|----|--------------------|----------|
| 1. | coronariūus, a, um | coronary |
| 2. | fibrōsus, a, um | fibrous |
| 3. | internus, a, um | internal |

4. lymphaticus, a, um	lymphatic
5. mastoidēus, a, um	mammiform
6. mediūus, a, um	middle
7. ossēus, a, um	bony
8. palatīnus, a, um	palatine
9. petrōsus, a, um	stony
10. pharyngēus, a, um	pharyngeal
11. profundus, a, um	deep
12. pterygoidēus, a, um	wing-shaped, pterygoid
13. sinister, tra, trum	left
14. spinōsus, a, um	spinous
15. thoracīcus, a, um	thoracic
16. thyreoideus, a, um	thyroid
17. transversus, a, um	transverse
18. venōsus, a, um	venous
19. zygomaticus, a, um	zygomatic

2nd group of adjectives

20. arciformis, e	arch-shaped
21. articulāris, e	articular
22. cervicālis, e	cervical
23. ethmoidālis, e	sieve-shaped
24. frontālis, e	frontal
25. horizontālis, e	horizontal
26. lateralis, e	lateral
27. lumbulis, e	lumber
28. occipitalis, e	occipital
29. orbitalis, e	orbital
30. ovalis, e	oval

30. ovālis, e	oval
31. parietālis, e	parietal
32. pulmonālis, e	pulmonary
33. sagittālis, e	sagittal
34. sphenoidālis, e	wedge-shaped, sphenoid
35. superficiālis, e	superficial
36. temporālis, e	temporal
37. vertebrālis, e	vertebral

Control questions

1. What are the grammatical categories of an adjective?
2. In what groups are they divided?
3. What kind of adjectives do belong the first group and how are they declined?
4. What kind of adjectives do belong the second group and how are the adjective declined?
5. What is the dictionary form of adjectives with one gender ending ,two endings and three endings ?

Sample Test №4

1. Translate the following terms into Latin according to grammatical agreement:

pharyngeal network;
 deep cervical lymphatic node; oval
 opening;
 thoracic fascia; transverse
 palatine raphe;

2. Translate the following terms into Latin according to grammatical agreement:

palatine process of upper jaw; valve of coronary sinus; middle fossa of skull; left lumbar trunk

3. Translate the following terms into Latin according to grammatical agreement:

**pulmonary surface; lateral ligament; right plate; palatine process; vertebral ganglion (nerve node);
costal arch; frontal crest; occipital angle; medial head;**

Topic 4

Comparative degree of adjectives

DEGREES OF COMPARISON OF ADJECTIVES. Comparative degree: forming and declination.

The aim of the lesson:

1. To form new theoretical knowledge on the topic
2. To form practical abilities on an independent information retrieval on the set topic
3. To form practical abilities in forming and declination of adjectives in comparative degree with nouns.

Concrete tasks:

A student should know:

1. The rule of adjective formation in comparative degree.

2. Dictionary form of adjectives in comparative degree
3. Declination of adjectives in comparative degree.
4. The most frequently used adjectives in comparative degree in anatomical terminology.
5. Coordination principle of adjectives with nouns
6. The peculiarities of formation and usage of adjectives *big* and *small* in anatomical terminology.

A student should be able to:

1. Form comparative degree of adjectives
2. Decline adjectives in comparative degree
3. Translate anatomical terms from Latin into English and from English into Latin.

Questions for defining of initial level

1. What is adjective?
2. What are the grammatical categories of an adjective?
3. What groups are the adjectives in positive degree divided into?
4. What adjectives belong to the I st group and how are they declined?
5. What adjectives belong to the II group and how are they declined?
6. What is included in the dictionary form of adjectives with three gender endings?
7. What is included in the dictionary form with two gender endings?
8. What is the peculiarity of the adjective dictionary form with one gender ending?
9. What are the degrees of comparison in Latin?

The content

The adjectives are gradable. This means that the person or thing referred to can possess more or less of the quality mentioned. The usual way to indicate the amount of a quality in Latin is by adding specific suffixes to the word's stem.

There are three degrees of comparison of adjectives in Latin:

- Positive degree: The positive degree expresses a quality of thing or person for itself, without comparing to a similar quality of other things or persons. It is the basic form of adjective, by which it is presented in the dictionaries: longus, a, um; frontālis, e.
- Comparative degree.
- Superlative degree.

II. THE COMPARATIVE DEGREE

The comparative degree expresses a higher quality of thing or person as compared with the same quality of other things or persons. It is formed by adding the suffixes –īor for masculine & feminine and –īus for neuter to the stem of adjectives (obtained from the genitive form without its ending).

The dictionary form of the adjectives has two components:

1. Nominative singular masculine & feminine form with the suffix –īor;
2. Suffix –īus of the Nominative singular neuter form.

E.g.: anteriōr, īus

You should remember the adjectives in comparative degree used in the anatomical terminology:

<i>Masculine & feminine</i>	<i>Neuter</i>	<i>Genitive form</i>	<i>English</i>	<i>Dictionary form</i>
anterior	anterius	anteriōris	anterior	anterior, ius
posterior	posterius	posteriōris	posterior	posterior, ius
superior	superius	superiōris	upper, superior	superior, ius
inferior	inferius	inferiōris	lower, inferior	inferior, ius
major	majus	majōris	great, greater, major	major, ius
minor	minus	minōris	small, lesser, minor	minor, ius

Examples of different English translations of the comparative degree:

- | | |
|---|---|
| 1) Lat. Tubercūlummajus (humēri) - | Eng. <i>Greater</i> tubercle of humeri |
| 2) Lat. Forāmenoccipitālemagnum - | Eng. <i>Great</i> occipitalforamen |
| 3) Lat. Nervuspetrōsusmajor - | Eng. <i>Greater</i> petrosalnerve |
| 4) Lat. Nervusoccipitālismajor - | Eng. <i>Greater</i> occipitalnerve |
| 5) Lat. Nervusauriculārismagnus - | Eng. <i>Great</i> auricularnerve |

The stem of the adjectives in the comparative degree coincides with the Nominative masculine & feminine form terminated by -ior. The comparative degree is declined on the pattern of the 3rd declension. The Genitive singular form in the comparative degree is formed by adding the ending -is to the stem.

E.g.: stem - superior + Genitive ending of the 3rd declension -is = superiōris
for masculine & feminine & neuter.

The adjectives in the comparative degree are placed on the last position:

E.g.: nervus cutanēus brachīi laterālis inferiōr – *inferior lateral cutaneous nerve of the arm*

Declination of adjectives in comparative degree.

Adjectives in comparative degree are declined according to the 3rd declension.

The most frequently used adjectives in anatomical terminology in the form of the Comparative degree.

In anatomical terminology only 6 adjectives are used in the form of the comparative degree. They should be remembered in their dictionary form.

Latin dictionary form Genitive form Stem

anterior, ius
posterior, ius
superior, ius
inferior, ius
major, jus

minor, us

Peculiarities of formation and usage of adjectives *big* and *small*.

a) The positive and the comparative degree of adjectives *big* and *small* are formed from different stems:

Positive degree	Comparative degree
magnus, a, um - big	major, jus - big
parvus, a, um - small	minor, us - small

6) Forms *magnus* / *parvus* are used, if a solitary anatomical structure is indicated:

forāmen (occipitāle) magnum — foramen (occipital) magnum

arteriapancreatīca magna — greater pancreatic artery vena magna

cerēbri — great cerebral vein nervusaureculārismagnus — great

auricular nerve musculus adductor magnus — adductor magnus muscle

nucleusmagnus — large nucleus

2. Forms *major* / *minor* are used, if dimensions of two similar and placed next to each other anatomical structures are compared:

ala major / ala minor — greater wing / lesser wing

pelvis major / pelvis minor — greater pelvis / lesser pelvis nervuspetrōsus major /

nervuspetrosus minor — greater petrosal nerve /

Control questions

1. Give the indications of comparative degree of adjectives of masculine, feminine and the neuter gender.
2. What endings in Gen.sing have adjectives of all genders in comparative degree?
3. How can you form Gen.sing of adjectives of all genders in the comparative degree? Give examples.
4. How do adjectives in the comparative degree agree with nouns?

Exercises

1. ***Give orally the dictionary form of the following adjectives:***

articulāris, compositum, dextrum, frontālis, impar, interna, libĕrum, nasāle, palatīna, sapiens, simplex, teres, thoracicum, minor, antĕrius, minus, superior

2. Correspond the following adjectives with the nouns:

articulatio, ōnis f (compositus, a, um; sinister, tra, trum; simplex, ĭcis); caput, ĭtis n (minor, us; longus, a, um; brevis, e)

cornu, us n (occipitalis, e; hyoideus, a, um; superior, ius) facies, ei f
(costalis, e; posterior, ius; dexter, tra, trum) ganglion, i n (impar, āris;
sublingualis, e; superior, ius); ligamentum, i n (teres, ĕtis; brevis, e; minor, us);

margo, ĭnis m (dexter, tra, trum; liber, ĕra, ĕrum; nasalĭs, e); musculus, i m
(teres, ĕtis; major, jus; latissĭmus, a, um); nervus, i m (hypoglossus, a, um;
occipitalis, e);

processus, us m (articularis, e; palatĭnus, a, um; brevis, e)

3. Make up grammatical agreement of the adjectives with the nouns in Latin:

arch (dental, venous, left); artery (deep, lingual, right); bone (short, palatine, hyoid); canal (long, short, sacral); crest (lacrimal, external); duct (hepatic, sublingual); head (upper, lower); joint (complex, simple); process (palatine, costal); region (cervical, mastoid); tubercle (carotid, lateral); vein (deep, sacral); vertebra (prominent, thoracic); vessel (left, lymphatic)

4. Give the dictionary form of each word and translate the following terms into Latin in Nominative and Genitive cases:

articular surface; costal arch; deep lymphatic vessel; frontal crest; lateral vein; anterior ethmoidal opening; left hepatic duct; long ligament; medial root; labial artery; occipital angle; oval opening; palatine process; superficial vein; vertebral column; lesser wing; lower lip; greater petrosal nerve; teres minor muscle

5. Write down the dictionary form and translate into English:

arcus anterior atlantis; concha nasalissuprĕma; crista tuberculimajoris; facies anterior
partispetrōsae; fossa cranii anterior; labium faciēinferius;
musculuslongissĭmuscapĭtis; musculuspalpebraesuperiōris; pars libĕramembri superiōris; sulcus sinus
petrōsiinferiōris;

Vocabulary

I. Latin-English vocabulary

1st declension

arteria, ae f— artery concha, ae f—
concha, shell

fossa, ae f— fossa, little hole palpebra,
ae f— eyelid

2nd declension

labium, i n— lip
ligamentum, i n—
ligament membrum, i n— limb
musculus, i m— muscle

3rd declension

articulatio, ōnis f— joint
atlas, antis m— atlas (the first cervical vertebra)
margo, ĩnis m—
margin, border
pars, partis f— part

4th declension

arcus, us m— arch

1st group of adjectives including forms of the superlative degree

compositus, a, um— complex
dexter, tra, trum— right
hyoideus, a, um— hyoid, sublingual (bone)
hypoglossus, a, um—
hypoglossal, sublingual (nerve)
latissimus, a, um— latissimus (muscle),
the broadest
liber, ěra, ěrum— free
longus, a, um— long
magnus, a, um— large (vein), magnus (m. adductor), great (nerve)
mastoideus, a, um— mastoid
palatinus, a, um— palatine
petrosus, a, um— petrosal
sacer, cra, crum— sacral
(bone)
sinister, tra, trum— left
supremus, a, um— supreme

Adjectives in the form of comparative degree

anterior, ius — anterior
inferior, ius — inferior, lower
major, ius — major, greater
minor, minus — minor, lesser
posterior, ius — posterior
superior, ius — superior, upper

2nd group of adjectives

alāris, e — alar articulāris, e —

articular brevis, e — short

communīcans, ntis — communicating costālis, e
— costal

frontālis, e — frontal

impar, āris — impar, unpaired nasālis,
e — nasal

occipitālis, e — occipital sacrālis,

e — sacral simplex, īcis — simple

sublinguālis, e — sublingual (excepting nerve and bone) teres, ėtis — round
(excepting foramen)

II. English- English-Latin glossary

arch— arcus, us m artery—

arteria, ae f articular —

articulāris, e back — dorsum, i n

carotid — carotīcus, a, um

cervical— cervicālis, e column —
columna, ae f

complex— composītus, a, um costal—
costālis, e

crest — crista, ae f

deep — profundus, a, um

dental— dentālis, e

dorsi (= of the back) — dorsum, i n external—
externus, a, um

hepatic — hepaticus, a, um hyoid —

hyoideus, a, um (os) joint — articulatio,

ōnis f lacrimal— lacrimālis, e lateral—
laterālis, e

lower — inferior, ius left —

sinister, tra, trum lesser —

minor, us lingual— linguālis, e

long — longus, a, um

lymphatic — lymphaticus, a, um mastoid

— mastoideus, a, um medial— mediālis, e

occipital— occipitālis, e oval—
ovālis, e

palatine — palatīnus, a, um petrosal—
petrōsus, a, um prominent — promīnens,
entis pterygoid — pterygoideus, a, um
right — dexter, tra, trum sacrālis, e
(exemptos) — sacral short — brevis, e

simple — simplex, ĭcis

sublingual— sublingualis, e (except for os and nervus)

superficial— superficialis e superior

— superior, ius upper — superior,

ius vein— vena, ae f

venous — venōsus, a, um

vertebral— vertebrālis, e

vessel— vas, vasis n wing — ala,

ae f

Sample Test 5

1. Correspond the following adjectives with the nouns:

articulatio, ōnis f (compositus, a, um; sinister, tra, trum; simplex, ĭcis); caput, ĭtis n (minor, us;

longus, a, um; brevis, e)

cornu, us n (occipitālis, e; hyoideus, a, um; superior, ius) facies, ĕi f

(costālis, e; posterior, ius; dexter, tra, trum) ganglion, i n (impar, āris;

sublinguālis, e; superior, ius); ligamentum, i n (teres, ĕtis; brevis, e; minor,

us);

2. Make up grammatical agreement of the adjectives with the nouns in

Latin:

arch (dental, venous, left) artery (deep,

lingual, right) bone (short, palatine, hyoid)

canal (long, short, sacral) crest (lacrimal,

external) duct (hepatic, sublingual) head

(upper, lower)

3. Write down the dictionary form and translate into English:

arcus anterior atlantis concha

nasālissuprēma crista

tuberculum majoris facies anterior

partis petrōsae fossa cranii anterior

Topic 5

The Superlative Degree of adjectives. Degrees of comparison derived from different stems. General information about adjectives. Substantivisation.

Prefixes. Complex adjectives.

The Superlative Degree. Degrees of comparison derived from different stems. Substantivation. Prefixes. Complex adjectives.

The aim of the lesson

1. To form new theoretical knowledge on the topic
2. To form practical abilities on an independent information retrieval on the set topic
3. To form practical abilities in forming and declination of adjectives in the superlative degree .Matching adjectives to a superlative degree with nouns.
4. To form practical skills in word formation (affixation, combining stems)
5. To revise the grammar about adjectives

Concrete tasks

A student should know:

1. The rule of forming the superlative degree of an adjective.
2. The dictionary form of an adjective in the superlative degree
3. Declination of adjectives in the superlative degree.
4. Degrees of comparison, formed from different stems.
5. The most frequently used prefixes in anatomical terminology
6. Suffixes of adjectives

A student should be able:

1. To form the superlative degree of an adjective.
2. To decline adjectives in the superlative degree.
3. To translate multiword anatomy-histological terms

Questions for defining initial level:

1. What grammatical categories does the adjective have?
2. What groups are the adjectives divided into in the positive degree?
3. What adjectives belong to the first group and how are they declined?
4. What adjectives belong to the second group and how are they declined?
5. How is the comparative degree of an adjective formed?

6. How are the adjectives in comparative degree declined?
8. How the comparative degree of adjectives big *and small* is formed?
9. How are the adjectives with the meaning *upper, lower, front, rear* translated into English?

The content of the lesson

III. THE SUPERLATIVE DEGREE

The superlative degree expresses a highest quality of thing or person as compared with the same quality of other things or persons.

You should remember the adjectives in superlative degree used in the anatomical terminology:

- | | |
|-----------------------------|------------------------|
| • Latissĭmus, a, um | <i>broadest</i> |
| • Longissĭmus, a, um | <i>longest</i> |
| • Maxĭmus, a, um | <i>greatest</i> |
| • Minĭmus, a, um | <i>least</i> |
| • Suprĕmus, a, um | <i>supreme</i> |

The dictionary form of the adjectives in the superlative degree coincides with the dictionary form of the 1st group adjectives and consists of **three components**:

1. Adjective in the masculine form;
2. The feminine ending;
3. The neuter ending.

The superlative degree is declined according to the pattern of the 1st and 2nd declensions, i.e. the adjectives have the masculine & neuter genitive ending–i, and the feminine genitive ending–ae.

EXERCISES

1. Make up the dictionary form of the adjectives:

brevior (shorter); longior (longer); minor (small, minor); major (great, greater, major); anterior (anterior); posterior (posterior); superior (upper, superior); inferior (lower, inferior); simplicior (simpler).

2. Translate into Latin and make up grammatical agreement of the following nouns: lower (sinus, part, spine); small (tubercle, opening, fossa); anterior (sulcus, tubercle, crest, opening, ligament); posterior (arch, surface, ligament); higher (process, opening, slit); great (sulcus, wing, head); small and great (horn).

3. Make up Genitive singular forms, find the stem: major, jus (great, major); albius, ius (white); minor, us (small, minor); latior, ius (wider); inferior, ius (lower); simplicior, ius (simpler); superior, ius (upper, superior); longior, ius (longer); breviar, ius (shorter); posterior, ius (posterior); anterior, ius (anterior).

4. Make up Genitive singular forms: tuberculum obturatorium posterius (posterior obturative tubercle); processus superior (superior process); incisura ischiadica major (greater ischiadic slit); foramen superius (superior opening); ramus superior (superior branch); arcus posterior (posterior arch); incisura superior (superior slit); labium inferius (lower lip); facies posterior (posterior surface); cornu majus et minus (small and great horn);

caput majus (greater head); ligamentum posterius (posterior ligament); sulcus major (greater sulcus), ala major (greater wing).

5. Make up grammatical agreement of following adjectives with nouns:

tuberculum thyroïdē... superius... (superior thyroid tubercle); fissura orbitalis... inferius... (lower orbital fissure); linea glutinea... anterior... (anterior gluteal line); foramen ethmoidale... anterius... (anterior ethmoidal opening); spina tympanica... minus... (small tympanic spine); processus articularis... inferius... (lower articular process); plexus hypogastricus... superius... (superior hypogastric network); ligamentum longitudinale... anterius... (anterior longitudinal ligament).

6. Translate into Latin: a) small tubercle; small horn; small pelvis b) anterior arch; anterior plate; anterior leg c) superior angle; superior surface; superior lip

7. Make up Genitive singular forms: facies anterior (anterior surface); angulus inferior (lower angle); cornu majus (greater horn); ganglion superius (superior ganglion (nerve node)); pelvis minor (small pelvis); tuberculum majus (greater tubercle); arcus posterior (posterior arch); radix anterior (anterior root).

8. Determine the case of each word and the part of speech:

facies anterior partis petrosae; linea temporalis superior; fovea articularis processus articularis superioris; ala minor ossis sphenoidalis; arcus dentalis inferior; processus articularis superior vertebrae lumbalis;

ramus dexter venae portae; musculus palpebrae superioris; crista tuberculi majoris; sulcus nervi petrosi majoris; caput superius musculi pterygoidae lateralis; tuberculum mediale processus posterioris tali; pars lateralis ossis occipitalis; hiatus canalis nervi petrosi minoris; nervus cutaneus brachii lateralis inferior; processus maxillaris conchae nasalis inferioris; ligamentum longitudinale anterius columnae vertebralis.

9. Translate into Latin using superlative degree: gluteus maximus muscle; the longest muscle of neck; superior nuchal line; longissimus chest muscle; supreme nasal concha; the widest back muscle bursa ;gluteus minimus muscle; the widest back muscle; scalenus minimus muscle; little (the fifth) finger.

VOCABULARY

- | | |
|-----------------------|--------------------------|
| 1. brevis, e | short |
| 2. bulbus, i m | bulb |
| 3. bursa, ae f | pouch, sac |
| 4. cavus, a, um | caval, hollow |
| 5. cervix, icis f | neck |
| 6. cingulum, i n | girdle |
| 7. cutaneus, a, um | cutaneous |
| 8. dexter, tra, trum | right |
| 9. digitus, i m | finger; toe |
| 10. gluteus, a, um | pertaining to buttocks |
| 11. hyoidaeus, a, um | sublingual, hypoglossal |
| 12. jugularis, e | jugular |
| 13. longitudinalis, e | longitudinal, lengthwise |
| 14. mediālis, e | medial |
| 15. nasālis, e | nasal |
| 16. nervus, i m | nerve |
| 17. ostium, i n | mouth, aperture, opening |
| 18. palpebra, ae f | eyelid |
| 19. scalēnus, a, um | stairs-shaped |
| 20. talus, i m | ankle bone, talus |
| 21. tendo, ūnis m | tendon |

22. thorax, ācis m chest

23. tibiālis, e tibial

Positive degree of comparison

24. magnus, a, um large, great

25. parvus, a, um little, small

Comparative degree

26. anterior, ūs anterior, front

27. inferior, ūs lower

28. major, us large

29. minor, us small

30. posterior, ūs back

31. superior, ūs higher, upper

Superlative degree

32. latissīmus, a, um widest

33. longissīmus, a, um longest

34. maxīmus, a, um largest

35. minīmus, a, um smallest

36. suprēmus, a, um highest

a) ;

Topic 6

**Final lesson. Preparation for the test No.1 “Multiword
anatomic histological term with the coordinated and
uncoordinated attribute”**

Final lesson. Preparation for the test No.1 “Multiword anatomic histological term with the coordinated and uncoordinated attribute”

The aim of the lesson:

- To revise grammar material: adjective, types of attribute, structural types of anatomic histological terms.
- to revise vocabulary
- to train practical skills in translation of anatomic histological terms from English into Latin and from Latin into English

Concrete task:

A student should know

- a dictionary form and features of the I,II,III,IV,V declinations of nouns
- a dictionary form and declinations of adjectives of the first group
- a dictionary form and declinations of adjectives of the second group
- a dictionary form and declinations of adjectives in the comparative degree and if adjectives of one endings
- structural types of anatomic histological terms
- consequence of actions while translating multiword anatomic histological actions from English into Latin and from Latin into English
- vocabulary notes

Студент должен уметь:

A student should be able to :

- define the gender and declination of a noun
- define the gender and declination of adjectives of the first and the second groups and adjectives in the comparative degree.
- to coordinate nouns of the five declinations with the adjectives of all groups.
- to translate multiword anatomic histological terms from English into Latin and from Latin into English

Content:

To revise the following theoretical and practical material:

- The vocabulary
- Noun: a dictionary form, signs of a gender and declination
- Adjective: a dictionary form, gender endings and declination of adjectives of the first and the second groups and adjectives in the superlative degree.
- Checking of the homework
- Test

Revision

Dictionary form – the order of writing words in the vocabulary notes

Noun (NOMEN SUBSTANTIVUM)

Dictionary form – 3 components: 1) full form in Nom. sg. 2) ending in Gen.sg., 3) gender

NB! All the components of a dictionary form are pronounced

Signs of declinations and gender of a noun

decl.	gender	Nom. sg.	Gen. sg.	Examples
I	f	-a	-ae	costa, ae f
II	m	-us/-er		musculus, i m cancer, cri m

	n	-um/-on	-i	ligamentum, i n ecephalon, i n
III	m f n	разные	-is	pulmo, onis m articulatio, onis f coma, atis n
IV	m n	-us -u	-us	processus, us m cornu, us n
V	f	-es	-ei	facies, ei f

Adjectives (NOMEN ADJECTIVUM)

NB! A dictionary form of an adjective consists of male form, endings of female and neuter in Nom. sg.: **m, f, n (Nom. sg.)**

group	dictionary form	Gender endings Nom. sg.	declinatio n	Endings in Gen. sg.
I	longus, a,um dexter,tra,trum asper,era,erum	m - -us/-er longus, dexter,asper f - -a longa, dextra, aspera	m- II f – I n - II	-i longi, dextri,asper -ae longae,dextrae,asperae -i

		n - -um longum, dextrum, asperum		longi,dextri,asperi
II	alaris, e cervicalis, e	m,f - -is n - -e	m,f,n -III	-is (m,f,n) alaris (m,f,n) cervicalis (m,f,n)
Сравни ит. Степе нь	anterior, ius major, jus minor, us	m,f - -ior n - -us	m,f,n - III	NB! основа для m,f,n – это форма мужского рода! -ioris (m,f,n) anterioris (m,f,n) majoris (m,f,n) minoris (m,f,n)

For training and activation of knowledge, it is useful to work independently in doing the exercises similar to the test exercises. Some exercises are done on the blackboard at the same time.

Sample Test

1. Make up grammatical agreement of the following adjectives with the given nouns:

- | | | |
|----|---------------------------------|---------------------------------------|
| 1. | sulcus, i m
ligamentum, i n | transversus, a, um

linea, ae f |
| 2. | sulcus, i m
os, ossis n | palatīnus, a, um |
| 3. | sutūra, ae f
angŭlus, i m | processus, us m
frontālis, e |
| 4. | valvŭla, ae f
plexus, us m | tuber, ěris n
venōsus, a, um |
| 5. | processus, us m
facies, ěi f | sinus, us m
articulāris, e |
| 6. | muscŭlus, i m
fossa, ae f | tubercŭlum, i n
pterygoidĕus, a um |
| 7. | arcus, us m
os, ossis n | zygomatĭcus, a, um |
| 8. | facies, ěi f
ganglion, i n | internus, a, um |

2. Make up Genitive forms of the following adjectives:

1. cervicālis, e

2. thoracicus, a, um

3. internus, a, um

4. medius, a, um

5. sinister, tra, trum

6. lumbalis, e

7. simplex, icis

8. lateralis, e

9. osseus, a, um

10. temporalis, e

3. Translate into Latin and make up grammatical agreement of the following nouns:

lower (sinus, part, spine);

small (tubercle, opening, fossa);

anterior (sulcus, tubercle, crest, opening, ligament); posterior (arch, surface, ligament);

higher (process, opening, slit); great
(sulcus, wing, head); small and great
(horn).

Topic 7

Latin III Declension nouns and their main peculiarities. Masculine gender

LATIN THIRD DECLENSION NOUNS. MASCULINE GENDER

This lesson is divided into the following sections:

The aim of the lesson:

1. To form new theoretical knowledge on the grammar
2. To form practical skills in independent search of information in the given field
3. To form practical skills in the defining the masculine third declension nouns according to the endings in Nom. Sing.
4. To find the stem of the third declension nouns.
5. To become familiar with the structure of muscles names.

Concrete tasks:

A student should know:

1. The peculiarities of the nouns of the III declension.
2. The endings of the masculine third declension nouns according to the endings in Nom. Sing.
3. The peculiarities of grammar structure of terms of muscles names.

4. Vocabulary notes

5. Exceptions to the rules of the gender

A student should be able to:

1. Compose the dictionary form of a noun of the masculine third declension
2. To translate multiword anatomic histological terms from English into Latin and from Latin into English.

Questions for defining the initial level

1. What is the main characteristic of the nouns of the III declension?
2. What distinguishes parisyllaba nouns from imparisyllaba ones?
3. What is the peculiarity of the dictionary form of imparisyllaba nouns?
4. What are the names of the muscles according to their functions

The Content

I. PARTICULARITIES OF THE THIRD DECLENSION

The third declension includes nouns of **all the three genders** which have **different endings** in Nominative singular and **-is** in Genitive singular.

Parisyllaba and imparisyllaba third declension nouns

The Latin nouns of the 3rd declension can be divided into **parisyllaba and imparisyllaba**.

The first group includes a few feminine nouns that have equal number of syllables in *Nominative singular* and *Genitive singular*, such as:

auris, is f – ear

cutis, is f – skin

The nouns that have one more syllable in *Genitive singular* than in *Nominative singular* are called imparisyllaba, cf. the following examples:

corpus, ōris n – body caput, ĭtis n –head

II. STEM OF LATIN THIRD DECLENSION NOUNS

The stem determination of Latin third declension nouns is of great practical significance because the stem gives the clue to the formation of most of the other forms, for example of plural forms.

The stem of nouns of the 3rd declension is determined by the Genitive singular form.

The stem of nouns of the 3rd declension is obtained from the Genitive singular form by dropping the ending–is.

E.g.:

forāmen, ĭtis n →	foramĭn-is	opening
caput, ĭtis n →	capĭt-is	head
parĭes, ētis m →	pariēt-is	wall

III. ENDINGS OF LATIN THIRD DECLENSION NOUNS

Most nouns ending by –os, -or, -o, -er, -ex, -es (imparisyllaba) are masculine,cf.:

	Endings		Examples
	Nominative	Genitive (with a part of the stem)	
1.- os		- ōris	flos, floris m - flower
2.- or		- ōris	constrictor, constrictōris m – constrictor

3.- o	- ōnis	pulmo, pulmōnis m - lung
	- ĭnis	homo, homĭnis m – man
4.- er	- ris	venter, ventris m – belly of a muscle
	- ēris	trochanter, trochantēris

			m - <i>trochanter</i>
5.-	ex	- īcis	cortex, cortīcis m - <i>cortex</i>
6.-	es	- ēdis - ētis	pes, pedis m - <i>foot</i> parīes, pariētis m - <i>wall</i>

IV. EXCEPTIONS TO THE RULE OF THE MASCULINE THIRD DECLENSION NOUNS ENDINGS

The following nouns having masculine endings are **feminine**:

- a. arbor, ōris f – *tree* (arbor vitae cerebelli – *medullary body of vermis*)
- b. gaster, tris f (Greek) - *stomach*;
- c. mater, tris f – *cerebral coat*
- d. pia mater - *pia mater of brain*
- e. dura mater - *dura mater of brain*

Attention!!! - In these terms the noun «mater» follows an adjective.

The following nouns having masculine endings are **neuter**:

- a. cor, cordis n - *heart*;
- b. os, ossis n - *bone*;
- c. os, oris n - *mouth*;
- d. tuber, ěris n - *tuber*.

V. LATIN MUSCLE NAMES

The Latin muscle names are composed of two elements: 1) the first element is the noun «muscle» - «**muscŭlus**»;

2) the second element is a masculine noun ending in **–or** (**–ōris**) or **–er** (**–ēris**).

E.g.: muscŭlus flexor – *flexor muscle*

In the Latin Anatomical Nomenclature all the muscle names are **masculine third declension nouns** ending in:

-or, ōris m (e.g.: *rotātor, ōris m*);

-er, ēris m (e.g.: *massēter, ēris m*).

The Latin muscle names are usually translated into English without a word “muscle”, cf.:

• **musculus massēter** - *chewer*;

• **musculus levātor** – *elevator etc.*

Most of the muscle names are not translated but transliterated, i.e. reproduced with the Latin letters:

E.g.: *musculus pronātor* – *pronator*.

Word order in the Latin muscle names:

1) word *musculus* in Nominative;

2) name of the muscle – a masculine noun in Nominative ending in **–or(–ōris)** or **–er (–ēris)**.

3) any other noun is in **Genitive**;

4) **adjectives** are placed at the end of the term.

E.g.:

1	2	3	Final position
Musculus	constrictor	pharyngis	medius
Musculus	tensor	fasciae	latae

VI. EXERCISES

1. Make up grammatical agreement of the adjectives with the given nouns:

1) *tuber* (*frontālis, e; parietālis, e; major, jus; minor, us*)

- 2) pulmo (dexter, tra, trum; sinister, tra, trum)
- 3) mater (pius, a, um; durus, a, um)
- 4) venter (posterior, ius; frontālis, e)
- 5) os (nasālis, e; hyoidēus, a, um; frontālis, e; parietālis, e)
- 6) paries (laterālis, e; jugulāris, e; anterior, ius; tympanīcus, a, um)

2. Translate into Latin:

- 1) tensor muscle of tympanic membrane
- 2) inferior constrictor muscle of pharynx
- 3) elevator muscle of scapula
- 4) rotator muscle of neck
- 5) elevator muscle of thyroid gland
- 6) depressor muscle of lower lip

3. Translate into Latin:

cortex of cerebellum, cortex of brain, cortex of lymphatic node, small (great) trochanter, heart apex, left (right) lung, sublingual bone, first chamber of the heart (atrium), dura mater of brain, frontal tuber, sulcus of vomer, medial surface of lung, floor of tympanic cavity, wedge-shaped bone, membranous wall of trachea, frontal wall of stomach, small horn of sublingual bone, zygomatic process of temporal bone, ethmoidal sulcus of nasal bone, notch of heart apex.

Vocabulary

apex, īcis m	apex, top, tip
atrium, ī n	first chamber of the heart (atrium)
cardiācus, a, um	cardiac

cerebellum, i n	cerebellum
cerēbrum, i n	brain
cochleāris, e	cochlear
cor, cordis n	heart
cortex, ĭcis m	cortex

EXCEPTIONS TO THE RULE OF THE MASCULINE THIRD DECLENSION

The following nouns having masculine endings are feminine:

- a. arbor, ōris f – tree (arbor vitae cerebelli – medullary body of vermis)
- b. gaster, tris f (Greek) - stomach;
- c. mater, tris f – cerebral coat
 - pia mater - pia mater of brain
 - dura mater - dura mater of brain

Attention!!! - In these terms the noun «mater» follows an adjective.

The following nouns having masculine endings are neuter:

- a. cor, cordis n - heart;
- b. os, ossis n - bone;
- c. os, oris n - mouth;
- d. tuber, ěris n - tuber.

Control questions.

1. Name the grammatical signs of nouns of the third declension.
2. Name the exceptions to the rule of masculine third declension.
3. Give the exception word combinations.
4. What is the peculiarity of word formation of muscles names according to their function?
5. How is the stem of masculine III declension noun defined ?
6. Name masculine III declension noun in their dictionary form.

Sample Test

Make up grammatical agreement of the adjectives with the given nouns:

- 1) tuber (frontālis, e; parietālis, e; major, jus; minor, us)
- 2) mater (pius, a, um; durus, a, um)
- 3) venter (posterior, ius; frontālis, e)
- 4) os (nasālis, e; hyoidēus, a, um; frontālis, e; parietālis, e)
- 5) paries (laterālis, e; jugulāris, e; anterior, ius; tympanicus, a, um)

2. Translate into Latin:

- 1) tensor muscle of tympanic membrane
- 2) inferior constrictor muscle of pharynx
- 3) elevator muscle of scapula
- 4) rotator muscle of neck
- 5) elevator muscle of thyroid gland
- 6) depressor muscle of lower lip

3. Translate into Latin:

1. cortex of cerebellum,
2. cortex of brain
3. small (great) trochanter
4. heart apex
5. left (right) lung,
6. sublingual bone
7. first chamber of the heart (atrium),
8. dura mater of brain,
9. frontal tuber,
10. sulcus of vomer

Topic 8

Latin third declension nouns. Feminine gender

LATIN THIRD DECLENSION NOUNS. FEMININE GENDER

The aim of the lesson:

- to form new theoretical knowledge on the theme ;
- to form practical skills in independent search of information ;
- to form practical skills in the given field: defining feminine the third declination nouns by their endings in Nom.Sing.
- to form practical skills in defining the gender of nouns of III declination (fem.)

Concrete tasks:

A student must know:

1. The main peculiarities of the third declination.
2. The endings of the feminine third declension nouns in Nom.Sing.
3. Exceptions to the rule of the feminine third declination nouns

A student should be able to:

1. To make dictionary form of the feminine third declension nouns
2. To translate multiword anatomic histological terms from English into Latin and from Latin into English.

Questions for defining of the initial level

1. What nouns belong to the third declination?
2. How to define the gender of a noun?
3. How to define the stem of a noun?
4. What kind of nouns is called parisyllaba?
5. What kind of nouns is called imparisyllaba?
6. What are the endings of masculine third declension nouns in Nom.sing?
7. How is the dictionary form of monosyllabic nouns formed?
8. Give the exceptions to the rules masculine third declension nouns

The content

LATIN THIRD DECLENSION NOUNS. FEMININE GENDER

I. ENDINGS OF FEMININE THIRD DECLENSION NOUNS

Most nouns ending by -io, -as, -is, -s, -x (imparisyllaba), -is (parisyllaba) are feminine, cf.:

	Endings		Examples
	Nominative	Genitive (with a part of the stem)	
1.	- as	- ātis	cavitas, cavitātis f - cavity
2.	- is (imparisyllaba)	- ĭdis	pyramis, pyramĭdis f - pyramid
3.	- is (parisyllaba)	- is	auris, auris f – ear
4.	- s	- tis	pars, partis f - part
5.	- x	- cis - gis	radix, radĭcis f – root meninx, meningis f - meninx
6.	- o - io	- ĭnis - ōnis	cartilāgo, cartilagĭnis f – cartilage articulatio, articulatiōnis f – joint

Exceptions to the rule:

The following nouns having feminine endings are masculine (according to 6 endings in the foregoing table):

1. atlas, ntis m atlas
2. pulvis, ěris m powder

3. sanguis, ĩnis m blood
4. axis, is m axis canālis, is m canal unguis, is m nail
5. dens, dentis m tooth
6. fornix, ĩcis m arch
7. larynx, ngis m larynx
8. pharynx, ngis m pharynx
9. coccyx, ýgis m tailbone
10. thorax, ācis m chest
11. tendo, ĩnis m sinew
12. margo, ĩnis m edge

The following nouns having feminine endings are neuter:

1. pancreās, ātis n - pancreas
2. vas, vasis n - vessel

NB! Special attention should be paid to the nouns with endings –io (-tio, -sio, xio). The majority of them have meaning of:

- a) action , function , process действия, функции, процесса), for example : names of functions performed by muscles (do not confuse with the names of muscles): pronatio, ionis f; flexio, ionis f, extensio, ionis f etc.;
- b) the names of surgical operations e.g: amputatio, ionis f – amputation (part of a body); resectio, ionis f - resection (of an organ or a part of an organ
- c) names of some procedures, e.g. transfusio, ionis f

Control questions

1. What are the gender endings of feminine III declension nouns?
2. What are the gender endings of feminine III declension nouns with –o?
3. What are the gender endings of feminine III declension nouns with –s?
4. What are the gender endings of feminine III declension nouns with –x?
5. What are the exceptions to the rule?

EXERCISES

1. Translate into English:

cavitas medullāris, basis cranii externa, cartilāgo thyroidēa, cartilāgo alāris major, margo inferior pulmōnis sinistri, auris externa, bifurcatio trachēae, basis pyramīdis renālis, margo utēri dexter, axis bulbi externus, pancreas accessorium, pars libēra gingīvae, cartilāgo septi nasi, cavitas oris propria, labyrinthus ossēus auris internae, terminatio nervi cutis, vas lymphaticum

superficiāle, canālis palatīnus major, caput pancreātis, regio thorācis posterior, sanguis venōsus et arteriōsus.

2. Make up grammatical agreement of adjectives with the given nouns:

- 1) cavitas (pleurālis, e; articulāris, e; medullāris, e)
- 2) margo (anterior, ius; frontālis, e; dexter, tra, trum)
- 3) auris (internus, a, um; externus, a, um; medius, a, um)
- 4) cartilāgo (costālis, e; alāris, e; articulāris, e; major, jus)
- 5) pars (ossēus, a, um; laterālis, e; anterior, ius; dexter, tra, trum)
- 6) vas (lymphaticus, a, um; sanguineus, a, um; capillāris, e)

3. Translate into Latin:

dura mater of brain, pyloric canal, fornix of stomach, canal of great stony nerve, angle of stomach, fornix of pharynx, ring-shaped part of fibrous vagina, sholder joint, capsule of pancreas, tympanic cavity of middle ear, greater palatine canal, cartilage of nasal septum, inferior constrictor of pharynx.

Vocabulary notes

1. alāris, e alar
2. anulāris, e ring-shaped
3. abor, ōris f abor
4. arteriōsus, a, um arterial
5. articulatio, ōnis f joint
6. auris, is f ear
7. bifurcatio, ōnis f bifurcation
8. capillāris, e capillary
9. carotīcus, a, um carotid
10. cartilāgo, ĩnis f cartilage
11. cavitas, ātis f cavity
12. coccyx, ýgis m coccyx, coccygeal bone
13. compositus, a, um complex
14. costālis, e costal
15. cutis, is f skin
16. dens, dentis m tooth
 - dens canīnus canine, cuspid tooth
 - dens incisīvus incisor tooth
 - dens molāris molar tooth
 - dens premolāris premolar tooth
 - dens decidūus milk tooth
 - dens sapientīae (dens serotīnus) wisdom tooth
17. fornix, ĩcis m fornix, arc
18. iliācus, a, um iliac
19. incisīvus, a, um incisive, cutting, sharp
20. labyrinthus, i m labyrinth
21. mandibulāris, e mandibular
22. masseterīcus, a, um masticatory, chewing

23.molāris, e molar 24.opticus, a, um
 optic, visual 25.pancrēas, ātis n
 pancreas 26.pelvis, is f pelvis
 27.pleurālis, e pleural 28.pyloricus, a,
 um pyloric 29.regiō, ōnis f region
 30.sanguinēus, a, um blood, sanguiferous 31.sanguis, īnis m
 blood
 32.simplex, īcis simple 33.sternālis, e
 sternal 34.tuberositas, ātis f tuberosity
 35.vas, vasis n vessel
 36.vita, ae f life

Exceptions to the rule:

1. atlas, ntis m atlas
2. pulvis, ěris m powder
3. sanguis, īnis m blood
4. axis, is m axis canālis, is m canal unguis, is m nail
5. dens, dentis m tooth
6. fornix, īcis m arch
7. larynx, ngis m larynx
8. pharynx, ngis m pharynx
9. coccyx, ýgis m tailbone
10. thorax, ācis m chest
11. tendo, īnis m sinew
12. margo, īnis m edge

The following nouns having feminine endings are neuter:

1. pancrēas, ātis n - pancreas
2. vas, vasis n - vessel

Test

1. Give several answers:

1) *Ending of feminine III declension:*

- a) -go
- b) -do
- c) -or
- d) -o
- e) -as

2) Feminine III declension nouns :

- a) pancreas, atis
- b) pons, pontis
- c) lens, lentis
- d) phalanx, ngis
- e) cervix, icis

3) exceptions of a rule:

- a) margo, ĩnis
- b) cartilago, inis
- c) pelvis, is
- d) canalis, is
- e) sanguis, ĩnis

2. *CHECK THE CONFORMITY:*

:

- | | |
|--------------------|----------|
| 1) cavitas, atis f | a) joint |
| 2) cutis, is f | b) area |
| 3) pars, partis f | c) bile |

- | | |
|------------------------|-------------|
| 4) radix, ĩcis f | d) ligament |
| 5) frons, frontis f | e) dent |
| 6) articulatio, ōnis f | f) cavity |
| 7) regio, ōnis f | g) skin |
| 8) bilis, is f | h) part |
| 9) tendo, ĩnis m | i) root |
| 10) dens, dentis m | g) forehead |

3. CHECK THE CONFORMITY:

- | | |
|--------------------|---------------|
| 1) larynx | a) meninx |
| 2) pharynx | b) extremitas |
| 3) ear | c) impressio |
| 4) cartilage | d) iris |
| 5) cerebral casing | e) pyrāmis |
| 6) end | f) vas |
| 7) impression | g) larynx |
| 8) iris | h) pharynx |
| 9) pyramid | i) auris |
| 10) vessel | j) cartilago |

4. CHECK THE CONFORMITY:

Terms	Endings in GEN.SING.
1) articulatio	a) -acis
2) cartilago	b) -atis
3) radix	c) -is
4) axis	d) -inis
5) pyramis	e) -ngis
6) menix	f) -idis
7) tendo	g) -icis
8) symphysis	h) -onis
9) pancreas	
10) thorax	

Topic 9

Latin third declension nouns and its main peculiarities. Neuter gender

LATIN THIRD DECLENSION NOUNS. NEUTER GENDER

The aim of the lesson:

- to form new theoretical knowledge on the theme .
- to form practical skills in independent search of information ;
- to form practical skills in the given field: defining neuter the third declination nouns by their endings in Nom.Sing.
- to form practical skills in defining the gender of nouns of III declination (neut.)

Concrete tasks:

A student must know:

1. The main peculiarities of the third declination.
2. The endings of the neuter third declension nouns in Nom.Sing.
3. Exceptions to the rule of the neuter third declination nouns

A student should be able to:

1. To make dictionary form of the neuter third declension nouns
2. To translate multiword anatomic histological terms from English into Latin and from Latin into English.

Questions for defining of the initial level

1. What nouns belong to the third declination?
2. How to define the gender of a noun?
3. How to define the stem of a noun?
4. What kind of noun is called parisyllaba?
5. What kind of noun is called imparisyllaba?
6. What are the endings of neuter third declension nouns in Nom.sing?
7. How is the dictionary form of monosyllabic nouns formed?
8. Give the exceptions to the rules neuter third declension nouns

Concrete tasks:

A student must know:

1. The main peculiarities of the III declension of nouns.
2. The endings of neuter III declension nouns in Nom.Sing.
3. Vocabulary notes
4. Exceptions to the rule.

A student should be able to:

1. Compose the dictionary form of neuter III declension nouns
2. To translate multiword anatomic histological terms from Latin into English and from English into Latin.

Questions for defining the initial level:

1. What nouns do belong to the III declension?
2. In what cases the stem of a noun is defined by the Genitive case?
3. What kind of adjectives is called parisyllaba?
4. What kind of adjectives is called imparisyllaba?
5. What are the endings of masculine III declension in Nom.Sing and what their Gen.sing is.
6. What are the endings of feminine III declension in Nom.Sing and what is their Gen.sing?
7. What are the exceptions to the rule?

The content

I. ENDINGS OF NEUTER THIRD DECLENSION NOUNS

Most nouns ending by **–ar, -e, -en, -ma, -ur, -us** are neuter, cf.:

	Endings		Examples
	Nominative	Genitive (with a part of the stem)	
1.	- ar	- ātis	hepar, hepātis n - liver
2.	- e	- tis	rete, retis n - network
3.	- en	- ĭnis	abdōmen, abdomĭnis n - abdomen
4.	- ma	- ātis	zygōma, zygomātis n – cheek-bone
5.	- ur	- ōris	femur, femōris n - thigh
6.	- us	- ĕris	glomus, glomĕris n - glome
		- ōris	pectus, pectōris n – chest
		- uris	crus, cruris n - shank
7.	- ut	- ĭtis	caput, capĭtis n – head

II. EXCEPTIONS TO THE RULE OF THE NEUTER THIRD DECLENSION NOUNS ENDINGS

The following nouns having neuter endings are **masculine**:

1. **lien, liēnis m - spleen**

2. **ren, renis m – kidney**

The neuter third declension nouns ending in **–ma** should be distinguished from feminine first declension nouns ending in **–a**:

E.g.: diaphragma, ātis n - diaphragm; chiasma, ātis n -chiasm; stroma, ātis n - stroma; systēma, ātis n -system; zygōma, ātis n –cheek-bone.

but

squama, ae f - scales; struma, ae f –crop.

III. EXERCISES

1. *Make up grammatical agreement of the adjectives with the given nouns:*

- 1) forāmen (occipitālis, e; mentālis, e; incisīvus, a, um; mastoidēus, a, um; major, jus)
- 2) systēma (centrālis, e; nervōsus, a, um; lymphatīcus, a, um)
- 3) caput (longus, a, um; transversus, a, um; laterālis, e; brevis, e)
- 4) ren (dexter, tra, trum; mobīlis, e; sinister, tra, trum; lobātus, a, um)
- 5) crus (sinister, tra, trum; laterālis, e; brevis, e; simplex, ĩcis; anterior, ius)
- 6) hepar (mobīlis, e; lobātus, a, um; major, jus)

2. *Translate into Latin:*

superficial lymphatic vessel, posterior nucleus of trapezoid body, internal carotid artery, base of heart, apex of heart, root of lung, cavity of uterus, renal pelvis, thyroid cartilage, pylorus part, left lobe of lung, ventricle of larynx, superior constrictor of larynx, capsule of pancreas, external oblique muscle of stomach, mucous membrane of mouth, cardiac impression of lung, body of mammary gland, spinal muscle of neck, the longest muscle of head, canal of neck of uterus, frontal region of face, external base of skull, wing of vomer, membranous wall of trachea.

VOCABULARY

1. abdōmen, ĩnis n	abdomen
2. accessorīus, a, um	additional
3. aortīcus, a, um	aortic, aortal
4. appendix, ĩcis f	process, appendix
5. cavernōsus, a, um	cavernous
6. centrālis, e	central
7. coccygēus, a, um	coccygeal

8. crus, cruris n	leg, crus
9. glomus, ėris n	glome, glomus
10.hepar, ātis n	liver
11.impressio, ōnis f	impression
12.lien, ēnis m	spleen
13.lobātus, a, um	lobulose, lobulous, lobulated
14.longus, a, um	long
15.mamma, ae f	mammary gland
16.mentālis, e	mental
17.mobīlis, e	mobile
18.nervōsus, a, um	nervous
19.oblīquus, a, um	oblique
20.radix, īcis f	root, radix
21.ren, renis m	kidney
22.renālis, e	renal
23.rotundus, a, um	round
24.stroma, ātis n	stroma
25.synchondrōsis, is f	synchondrosis
26.systema, ātis n	system
27.tegmen, ĩnis n	roof
28.thymus, i m	thymus

Exceptions to the rule:

ren, renis m - kidney

lien, enis m - spleen

splen, splenis m - spleen

pecten, inis m – crest

hymen, ėnis m (rp.) – hymen

lichen, ėnis m (rp.) - lichen

Control questions:

1. What are the endings of neuter III declination nouns in Nom. sing.?
2. How to differ nouns with similar endings –us of neuter and feminine gender?
3. What are the exceptions to the rule of the neuter III declination?

Test №10

1. Multiple choice:

1) Flexions of neuter III declension nouns:

- a) –ux
- b) –ur
- c) –e
- d) –as
- e) –ma

2) Neuter III declension nouns:

- a) humor, oris
- b) homo, inis
- c) hepar, atis
- d) systema, atis
- e) pectus, oris

3) exceptions to the rule:

- a) ren, renis
- b) crus, cruris
- c) tempus, ōris
- d) lien, ēnis
- e) tegmen, inis

2. CHECK THE CONFORMITY:

- | | |
|--------------------|---------------------|
| 1) abdōmen, ĩnis n | a) back of the head |
| 2) corpus | b) temple |
| 3) femur | c) clew |
| 4) occĭput | d) intestines |
| 5) tempus | e) hole |
| 6) glomus | f) head |
| 7) viscus | g) name |

- | | |
|------------|------------|
| 8) foramen | h) abdomen |
| 9) caput | i) body |
| 10) nomen | j) hip |

3. Check the conformity:

Terms	Flexions
1) ren sinist...	a) -er
2) glomus pulmonal...	b) -e
3) systema muscular...	c) -um
4) pancreas accessori...	d) -um
5) rete venos...	e) -us
6) crus anteri...	
7) capur superi...	
8) foramen occipital...	
9) diaphragma urogenital...	
10) vas capillar...	

4. Check the conformity:

Terms	Flexions in GEN.SING.
1) corpus	a) -inis
2) nomen	b) -itis
3) zygoma	c) -atis
4) viscus	d) -eris
5) diaphragma	e) -oris
6) tegmen	
7) occiput	
8) hepar	
9) caput	
10) abdomen	

Topic 10

**Preparation for the test number 2. Active Grammar
Nouns of the III declension of masculine, feminine and
neuter gender.**

Preparation for the test number 2. Active Grammar Nouns of the III declension of masculine, feminine and neuter gender.

The aim of the practical lesson:

- to revise theoretical knowledge on the subject;
- to revise and reinforce practical skills for self –determination the gender of the III declension according to their endings in Nom.Sing and changes of the stems of imparasyllaba nouns
- To revise vocabulary notes
- To reinforce practical skills in translation of multiword anatomic terms from English into Latin and from Latin into English

1. Concrete tasks :

A student should know

- The main peculiarities of the III declension.
- The endings of masculine, feminine, and neuter gender of nouns in Nom.Sing. and changes of stems of imparasyllaba III declension nouns
- Vocabulary notes (§ 73,76, § 83, §88)
- Exceptions to the rule

A student should be able to:

- Define the gender of a noun according to its ending in Nom. sg.
- Decline III declension nouns, taking into consideration the change of stems
- To coordinate III declension nouns with adjectives
- To translate multiword anatomic terms from English into Latin and from Latin into English.

The content:

To revise the following theoretical and practical material:

- To revise vocabulary notes
- To check homework
- To revise main peculiarities of III declension nouns

III Declension nouns and their peculiarities

1. The main sign of the III declension noun is ending **-is** in Gen. sg.
2. Nouns of all three genders belong to the III declension: pulmo, onis m, paries, etis f, caput, itis n
3. Each gender in Nom.sing. has much more endings than nouns of the I, II, IV, V declensions.
4. The stem of III declension nouns is defined by dropping of the ending **-is** in Gen. sg.
5. NB! The Latin nouns of the 3rd declension can be divided into parisyllaba and imparisyllaba.

The first group includes a few feminine nouns that have equal number of syllables in Nominative singular and Genitive singular, such as: auris, is f – ear

cutis, is f – skin

The nouns that have one more syllable in Genitive singular than in Nominative singular are called imparisyllaba.

e.g.: corpus, ōris n – body caput, itis n – head

6. If a noun in Nom.sg. has only one syllable, it means that in Gen. sg. it's written in the full form, e.g.: dens, dentis m; os, oris n; pars, partis f.
7. **N.B.** III declension has exceptions to the rule!
8. All III declension nouns are divided into three types: **consonant, vowel and mixed:**

Consonant type	Vowel type	Mixed type
Imparasyllaba nouns, which stems ends in one consonant	Nouns of Neuter gender with endings -e, -al, -ar in Nom.sing	a) parasyllaba nouns with ending –es, -is in Nom.sing b) imparasyllaba nouns which stem has double consonant ending
caput, it is n – capit-	rete, is n animal, alis n calcar, aris n	a) pubes, is f b) pars, partis f

The endings of III declension nouns are given in the table

m	f	n
-os, oris	-io, onis	-us/eris, oris, uris
-or, oris	-do, dinis	-en, inis
/ onis		
-o	-go, ginis	-ar, aris
\ inis		
-er, eris/tris	<u>-s (кроме -os):</u>	-ma, atis
	-as, atis	
	-is, /is, idis	-ut, itis
	-us/udis, utis	
<u>-es(неравносложные)</u>	-es, is (равносл.)	-ur/oris, uris
	-ns, ntis	
/ edis	-rs, rtis	-al/alis, llis
-es	<u>-x (кроме -ex)</u>	-e, is (равносл.)
\ etis	-ax, acis	
	-ix, icis	-c, ctis
-ex, icis	-ux, ucis	
	-nx, ngis	
	-lx, lcis	
	-	
Exceptions to the rule :	Исключения:	Исключения:
os, oris n – mouth	1. atlas, ntis m atlas	ren, renis m – kidney

os ossis n – bone	2. pulvis, ěris m powder	lien, enis m - spleen
cor, cordis n – heart	3. sanguis, ĩnis m blood	
tuber, eris n – hill	4. axis, is m axis canālis, is m canal unguis, is m nail	
gaster, tris f – stomach	5. dens, dentis m tooth	
mater, tris f – 1) mother; 2) cerebral casing	6. fornix, ĩcis m arch	
dura mater – hard mater of brain	7. larynx, ngis m larynx	
pia mater – pia mater of brain	8. pharynx, ngis m pharynx	
	9. coccyx, ýgis m tailbone	
	10. thorax, ācis m chest	
	11. tendo, ĩnis m sinew	
	12. margo, ĩnis m edge	

The Latin muscle names are composed of two elements: 1) the first element is the noun «muscle» - «muscŭlus»;

2) the second element is a masculine noun ending in –or (-ōris) or –er (- ěris).

E.g.: muscŭlus flexor – flexor muscle

In the Latin Anatomical Nomenclature all the muscle names are masculine third declension nouns ending in:

-or, ōris m (e.g.: rotātor, ōris m);

-er, ēris m (e.g.: massēter, ēris m).

The Latin muscle names are usually translated into English without a word “muscle”, cf.:

- muscŭlus massēter - chewer;
- muscŭlus levātor – elevator etc.

Most of the muscle names are not translated but transliterated, i.e. reproduced with the Latin letters:

E.g.: muscŭlus pronātor – pronator. Word order in
the Latin muscle names:

- 1) word muscŭlus in Nominative;
- 2) name of the muscle – a masculine noun in Nominative ending in –or(–ōris) or –er(–ēris).
- 3) any other noun is in Genitive;
- 4) adjectives are placed at the end of the term.

Tasks for independent work

Translate into Latin:

superficial lymphatic vessel, posterior nucleus of trapezoid body, internal carotid artery, base of heart, apex of heart, root of lung, cavity of uterus, renal pelvis, thyroid cartilage, pylorus part, body of mammary gland, spinal muscle of neck, the longest muscle of head, canal of neck of uterus, frontal region of face, external base of skull, wing of vomer, membranous wall of trachea, cavitas medullāris, basis cranii externa, cartilāgo thyroidēa, cartilāgo alāris major, margo inferior pulmōnis sinistri, auris externa, bifurcatio trachēae, basis pyramīdis renālis,

1. Make up grammatical agreement of the adjectives with the given nouns:

- 1) forāmen (occipitālis, e; mentālis, e; incisīvus, a, um; mastoidēus, a, um; major, jus)
- 2) systēma (centrālis, e; nervōsus, a, um; lymphaticus, a, um)

- 3) caput (longus, a, um; transversus, a, um; laterālis, e; brevis, e)
- 4) ren (dexter, tra, trum; mobilis, e; sinister, tra, trum; lobātus, a, um)
- 5) cavitas (pleurālis, e; articulāris, e; medullāris, e)
- 6) margo (anterior, ius; frontālis, e ; dexter, tra, trum)
- 7) auris (internus, a, um ; externus, a, um ; medius, a, um)

5. Define the stem in the following imparasyllaba nouns and put the following nouns into Nom. pluralis:

humor, oris m; pulmo, onis m; venter, ntris m; vomer, eris m; hallux, ucis m; liquor, oris m; index, icis m; stapes, edis m

6. Divide the following nouns into two groups, translate them and give the prural form.

Nomen, inis n, canalis, is m, incus, udis f, pectus, oris n, tegmen, inis n, auris, is f, cutis, is f, pulmo, onis m, cortex, icis m, vertex, icis m, synchondrosis, is f, axis, is m

Topic 11

**Nominativus pluralis of nouns and adjectives of I, II,
III, IV, V declensions.**

Nominativus pluralis of nouns and adjectives of I, II, III, IV, V declensions.

The aim of the lesson:

- To form new theoretical knowledge on the subject
- To form practical skills in formation of Nom. Pl. of nouns and adjectives of I, II, III, IV, V declensions.
- To form practical skills in translation of multiword anatomic-histological terms from English into Latin and from Latin into English in Nom. And Gen. Sing. And in Nom. Pl.

Concrete tasks:

A student should know

- Sequencing in formation of Nom. pl.
- Flexions of nouns and adjectives in Nom. pl.
- The most used conditional abbreviations in anatomic histological nomenclature.
- Active vocabulary.

A student should be able to :

- Decline nouns of the I, II, III, IV, V declensions in Nom. pl.
- Decline adjectives in Nom. Pl.
- Translate multiword anatomic histological terms from Latin into English and from English into Latin.

o Questions for defining the initial level

1. What are the characteristics of parasyllaba and imparasyllaba nouns of the III declension?
2. How is the practical stem of a noun defined?
3. How is the practical stem of an adjective defined?
4. What is the peculiarity of imparasyllaba nouns' dictionary form?

The content:

I. NOUNS AND ADJECTIVES ENDINGS IN NOMINATIVE PLURAL

The Latin **nouns** have Nominative plural endings as follows:

Declension	1	2		3		4		5
Gender	f	m	n	m, f	n	m	n	f
Endings	-ae	-i	-a	-es	-a (-īa)	-us	-ŭa	-es

Attention!!! – Remember one neuter noun of the 3rd declension which has the Nominative plural ending-**ia**: **rete** – **retia** (**network** – **networks**). Other neuter nouns of the 3rd declension, which have the Nominative plural ending-**ia**, are not used in the anatomical terminology.

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The Latin **adjectives** have Nominative plural endings as follows:

<i>Adjectives of the 1st group + adjectives in the superlative degree</i>			<i>Adjectives of the 2nd group</i>		<i>Adjectives in the comparative degree</i>	
m	f	n	m, f	n	m, f	n
-i	-ae	-a	-es	-īa	-es	-a

Attention!!! - All neuter nouns irrespective of their declension as well as all adjectives in the neuter form in Nominative plural end in-**a** (adjectives of the 2nd group in-**īa**).

II. FORMATION OF NOMINATIVE PLURAL FORMS

In order to form the Nominative plural forms you should:

1) determine:

- declension and gender of a noun or
- group and gender of an adjective;

- 2) find the stem and form the plural form by adding to the stem the appropriate Nominative plural ending of this declension and gender.

E.g.:

	Declension, gender, group and degree of comparison	Stem	Nominative plural
Nouns			
vena, ae f	1 declension, feminine	ven -	ven - ae
nervus, i m	2 declension, masculine	nerv -	nerv - i
spatium, i n	2 declension, neuter	spati -	spati - a
sinus, us m	4 declension, masculine	sin -	sin - us
cornu, us n	4 declension, neuter	corn -	corn - ūa
facies, ēi f	5 declension, feminine	faci -	faci - es
Adjectives			
cavernōsus	I group, masculine	cavernōs -	cavernōs - i

cavernōsa	1 group, feminine	cavernōs -	cavernōs - ae
cavernōsum	1 group, neuter	cavernōs -	cavernōs - a
frontālis	2 group, masculine or feminine	frontāl -	frontāl - es
frontāle	2 group, neuter	frontāl -	frontāl - ia
minor	Comparative degree, masculine or feminine	minor -	minōr - es
minus	Comparative degree, neuter	minor -	minōr - a

Attention!!! - In order to form the Nominative plural form of the **nouns of the 3rd declension** you should:

1. Form the Genitive singular form;
2. Determine the stem (obtained from the Genitive form without its ending –is);
3. Add the appropriate Nominative plural gender ending.

E.g.:

Dens → dent-is → dent- + -es → dentes

Forāmen → forāmīn-is → forāmīn- + -a → forāmīna

III. ABBREVIATIONS USED IN THE ANATOMICAL TERMINOLOGY

Singular form	Plural form
A. – arteria	Aa. - arteriae
B. – bursa	Bb. - bursae
Gl. - glandūla	Gll. - glandūlae
For. - forāmen	Forr. - forāmīna
Lig. - ligamentum	Ligg. - ligamenta
M. - muscūlus	Mm. - muscūli
N. - nervus	Nn. - nervi
R. - ramus	Rr. - rami
Vag. - vagīna	Vagg. - vagīnae
V. - vena	Vv. – venae

IV. EXERCISES

1. Determine the dictionary form of each word:

alveōli dentāles (dental alveoli), spatia interglobularia (interglobular spaces), valvūlae venōsae (venous valvulae), nomīna anatomīca (anatomical names), juga alveolaria (alveolar eminences), venae intercostāles anteriōres (anterior intercostal venae), labia oris (lips of mouth), canalicūli dentāles (dental small canales), facies articulāres (articular surfaces), ductus sublinguāles minōres (minor sublingual ducts), vasa sinusoidēa liēnis (sinusoid vessels of spleen), crura ossea (bony crura), arteriae ciliāres posteriōres longae (long posterior ciliary arteries).

2. Translate into Latin. Make up Nominative plural forms:

carotic (tuber, sulcus, canal), lymphatic (vessel, node, valve), incisive (canal, opening, fossa), articular (cavity, process, cartilage), nasal (concha, bone, opening), anterior (margin, surface, septum), palatine (tonsil, process), jugular (tubercle, incisure (slit), process), wing-shaped (canal, process, fossa), ethmoidal (crest, bone, foramen), occipital (region, lobe, opening), mammiform (process, incisure, opening), lower (wall, fissure, arch), transverse (process, lobe, ligament, artery), posterior (horn, nucleus, surface).

3. Determine the case, number and part of speech of each word in the terms:

- | | |
|--|--------------------------------------|
| 1) venae rectāles inferiōres | 9) ductus sublinguāles minōres |
| 2) incisūrae cartilagīnis | 10) partes orbitāles ossis frontālis |
| 3) meātus acustīci | 11) vasa sanguinea retīnae |
| 4) rami cardiāci cervicāles inferiōres | 12) nomīna anatomīca |
| 5) regiōnes membri inferiōris | 13) plexus venōsi vertebāles interni |
| 6) sutūrae cranii | 14) arteriae ciliāres posteriōres |
| 7) radīces spināles | 15) spatium intercostāle |
| 8) canāles palatīni minōres | |

4. Make up Nominative plural of following nouns:

ala, ae f arteria, ae f digītus, i m septum, i n alveolus, i m ligamentum, i n

	paries, ētis m
margo, īnis m	
forāmen, īnis n	fundus, i m
os, ossis n	arcus, us m
ductus, us m	
cornu, us n	
sinus, us m	
facies, ēi f	

5. Form Nominative plural of the following terms:

- 1) processus ciliāris

- 2) arteria gastrīca brevis
- 3) nodus lymphaticus lumbālis
- 4) glandūla linguālis
- 5) ganglion thoracicum
- 6) vena nasālis externa

V. VOCABULARY

1. alveolāris, e	alveolar
2. alveolus, i m	alveole
3. anatomīcus, a, um	anatomical
4. dentālis, e	dental
5. dorsālis, e	dorsal
6. foveōla, ae f	foveola
7. gastrīcus, a, um	gastric
8. intercostālis, e	intercostal
9. interglobulāris, e	interglobular
10. interlobulāris, e	interlobular
11.interspinōsus, a, um	interspinal
12.jugum, i n	eminence
13.nomen, ĩnis n	name
14.pectorālis, e	pectoral
15.retīna, ae f	retina
16.serrātus, a, um	serrate
17.sinusoidēus, a, um	sinusoid
18.spatium, i n	space
19.spinālis, e	spinal
20.sublinguālis, e	sublingual
21.synoviālis, e	synovial
22.carotīcus, a, um	carotic

23. vas, vasis n	vessel
24. cartilāgo, ĩnis f	cartilage
25. rectālis, e	rectal
26. crus, cruris n	crus
27. lien, ěnis m	spleen
28. cardiācus, a, um	cardiac

Sample Test

1. Determine the dictionary form of each word:

alveōli dentāles (dental alveoli),
spatia interglobularia (interglobular spaces), valvūlae
venōsae (venous valvulae), nomīna anatomīca
(anatomical names), juga alveolaria (alveolar eminences),
venae intercostāles anteriōres (anterior intercostal venae), labia oris (lips of
mouth)
canalicūli dentāles (dental small canales) facies
articulāres (articular surfaces)

2. Translate into Latin. Make up Nominative plural forms:

carotic (tuber, sulcus, canal) lymphatic (vessel,
node, valve) incisive (canal, opening, fossa)
articular (cavity, process, cartilage) nasal
(concha, bone, opening) anterior (margin,
surface, septum) palatine (tonsil, process)

3. Form Nominative plural of the following terms:

- 1) processus ciliāris
- 2) arteria gastrīca brevis
- 3) nodus lymphaticus lumbālis
- 4) glandūla linguālis
- 5) ganglion thoracicum
- 6) vena nasālis externa

Topic 12

Genetivus pluralis of nouns and adjectives of the I,II,III,IV,V declensions

Genetivus pluralis of nouns and adjectives of the I,II,III,IV,V declensions .

The aim of the practical class:

- To form new theoretical knowledge on the theme.
- To form practical skills in formation of Gen. pl. of nouns and adjectives of the I, II, III, IV, V declensions.
- To form practical skills in translation of anatomic histological terms from Latin into English and from English into Latin in Nom. and Gen. sg. And in Nom. And Gen. pl.

2. Concrete tasks:

A student should know

- Consequence of actions in formation of Gen. pl.
- The endings of nouns and adjectives in Gen. pl.
- Active vocabulary.

A student should be able to :

- Decline nouns of I,II,III,IV,V declensions in Gen. pl.
- Decline adjectives in Gen. pl.
- Translate multiword anatomic histological terms from English into Latin and from Latin into English.

o Questions for defining the initial level

1. What are the characteristics of parasyllaba and imparasyllaba III declension nouns?
2. How is defined the practical stem of nouns?
3. How is defined the practical stem of adjectives?
4. What is the peculiarity of a dictionary form of imparasyllaba nouns?

The content:

Revision of basic knowledge, necessary for understanding new grammar:

a) signs of declension of nouns

b) defining practical stem of nouns

c) adjectives: dictionary form, declension, defining of stems

Consequence of actions in formation Gen. pl.:

1. Write the word in its dictionary form
2. Give the declension
3. Find the stem
4. Add the necessary ending to the stem

The endings of GENETIVUS PLURALIS

Declination	Endings
I	f-arum
II	m-orum n-orum
III	-um 1. imparasyllabic nouns of m,f,n with the stem which is terminated by one consonant – pulmonum , articulationum , corporum 2. adjectives in the comparative degree (m, f, n) – superiorum , majorum -ium 1. the other nouns have the stem terminated in -id : the other nouns have the stem which is terminated by two consonants – ossium , partium , dentium 2. parasyllabic nouns with ending -es , -is (в Nom.sg.) – retium , aurium 3. adjectives of the second group (m,f,n) – alarium (m,f,n)
IV	m – uum n – uum
V	f – ium

NB! The noun **vas**, **vasis** в Gen. pl. is declined according to the II declension – **vasorum** (Gen. pl.)

Control questions

1. What is the consequence of actions of declining nouns and adjectives in Nom. pl. и Gen. pl?

2. Give the endings of Nom. pl., Gen. pl.
 3. What are the endings of neuter III declension nouns in Nom.pl.
 4. What are the endings of III declension nouns and adjectives in Gen. pl.
- Exercises:**

I. Give Gen. pl. Of the following nouns:

caput,itis n;

pulmo, onis m;

linea, ae f;

genu, us n;

facies, ei f;

ductus, us m;

ligamentum, i n;

rete, is n;

auris, is f;

canalis, is m;

vas, vasis n;

systema, atis n;

dens, dentis m;

pars, partis f.

II. Give Gen. pl. of the following adjectives:

albus, a, um;

longus, a, um;

squamosus, a, um;

rectus, a, um; costalis, e;

thoracalis, e; parietalis, e;

spinalis, e; major, jus;

anterior, ius; minor, us;

superior, ius

1. Determine the declension of each word, give the dictionary form:

capsulārum

faciērum

angulōrum

digitōrum

arteriārum

plexuum

foramīnum

cavōrum

ligamentōrum

gingivārum

arcuum

processuum

canalium

palpebrārum

tendīnum

cingulōrum

2. Translate into Latin. Give the dictionary form of each noun, make up Genitive plural:

incisura	trunk
valve	node
	shoulder
duct	blade
back	tubercle
canal	eye
horn	layer
neck	muscle
palate	

3. Make up the Genitive plural forms of the following adjectives:

1) dexter, tra, trum	7) articulāris, e
2) inferior, ius	8) mucōsus, a, um
3) laterālis, e	9) thoracicus, a, um
4) internus, a, um	10) temporālis, e
5) communis, e	11) superior, ius
6) latus, a, um	12) longissimus, a, um

4. Make up the Genitive plural forms:

vas lymphaticum superficiāle; nervus craniālis;

vena pulmonālis; cornu minus; processus transversus; concha nasālis; valvūla semilunāris.

IV. VOCABULARY

1.	articulatio, ōnis f	joint
2.	auriculāris, e	auricular
3.	chiasma, ātis n	chiasm
4.	craniālis, e	cranial

5.	extensor, ōris m	extensor
6.	fibulāris, e	fibular
7.	flavus, a, um	yellow
8.	flexor, ōris m	flexor
9.	interalveolāris, e	interalveolar
10.	interradiculāris, e	interradicular

11.	linguālis, e	lingual
12.	massa, ae f	mass
13.	medulla, ae f	medulla
14.	medulla ossium	(bone) marrow
15.	nodulus, i m	nodulus
16.	papilla, ae f	papila
17.	peron(a)eus, a, um	fibular
18.	plica, ae f	fold
19.	retinaculum, i n	retinaculum
20.	ruber, bra, brum	red
21.	semilunāris, e	semilunar
22.	trigeminālis, e	trigeminal
23.	trochleāris, e	trochlear
24.	regio, ōnis f	region
25.	incisīvus, a, um	incisive
26.	radix, īcis f	root
27.	sanguinēus, a, um	blood
28.	ciliāris, e	ciliary
29.	tonsilla, ae f	tonsil
30.	paries, ētis m	wall

**Final lesson. Preparation for the test work № 3 on the
theme «Multiword anatomic histological term with
coordinated and uncoordinated attribute**

Final lesson. Preparation for the test work № 3 on the theme «Multiword anatomic histological term with coordinated and uncoordinated attribute

The aim:

- To revise studied grammar; noun, adjective, types of adjectives, structural types of anatomic histologic terms.
- To revise vocabulary
- To train practical skills in translation of multiword anatomic histological terms from English into Latin and from Latin into English.

2. Concrete tasks :

A student must know

- Dictionary form and signs of I,II,III,IV,V declensions of nouns .
- Dictionary form and declensions of adjectives of the I group
- Dictionary form and declensions of adjectives of the II group
- Dictionary form and declension of adjectives in the comparative degree and adjectives of one ending
- Structural types of anatomic terms
- Consequence of actions in translation of multiword terms from English into Latin and from Latin into English.
- Vocabulary notes

A student should be able to :

- To define gender and declension of nouns
- To define gender and declension of adjectives of the I and II group, and adjectives in comparative degree and adjectives of one ending.
- To coordinate nouns of five declensions with adjectives of all groups
- To translate multiword anatomic terms from English into Latin and from Latin into English.

The content:

- Revision of vocabulary notes
- Noun: dictionary form, the signs of declension and gender.
- Adjective: dictionary form, gender endings and declension of adjectives of the I and II group and adjectives in comparative degree
- Consequence of actions in forming Nom. et Gen. pl.
- Checking homework
- Individual work under the supervision of a tutor
- Test

Revision

Dictionary form – order of writing words in the dictionary

Noun (NOMEN SUBSTANTIVUM)

Dictionary form – 3 components: 1) full form in Nom.sg., 2) ending in Gen.sg., 3) Gender

NB! All the components of a dictionary form are pronounced

Adjectives (NOMEN ADJECTIVUM)

Dictionary form of an adjective consists of the masculine form, ending of feminine and neuter forms in Nom.sing.: **m, f, n (Nom. sg.)**

NB! Adjectives don't have their own declension, they are declined according to the **I,II,III declensions of nouns!**

Declension	Gender	Nom. sg.	Gen. sg.	Nom. pl	Gen. pl.
I	f	-a	-ae	-ae	-arum
II	m	-us/-er	-i	-i	-orum
	n	-um/-on	-i	-a	-orum
III	m		m	m,f –es	1.-um

	f n	different	f \ -is n /	n – a n- ia (если Nom. sg. - e, -al, - ar)	a) imparasyllaba nouns with the stem ending in consonant: pulmo,onis m - pulmo<u>n</u>um b) adjectives in comparat degree: anterior, ius – anterior um (m,f,n) 1. –ium The rest
IV	m n	-us -u	-us -us	m - -us n - -ua	m - -uum n
V	f	-es	-ei	-es	-erum

Samples of individual work

1.Translate into Latin with writing out the words:

- 1) muscle of neck
- 2) base of skull
- 3) dividing wall of nose
- 4) small foot of arch of vertebra
- 5) zygomatic process of temporal bone
- 6) ethmoidal sulcus of nasal bone

- 7) dura mater of brain
- 8) the longest muscle of head
- 9) superficial lymphatic vessels
- 10) major and minor horns
- 11) nerve nodes of sympatic networks
- 12) anterior intercostal veins
- 13) widest muscle of back
- 14) minor palatine canals
- 15) external occipital protuberance

2. Translate the following terms into English:

- 1) venae digitales dorsales pedis
- 2) hiatus canalis nervi petrosi minoris
- 3) ganglia plexuum visceralium
- 4) vaginae tendinum musculorum extensorum carpi radialium
- 5) lobi glandulae mammariae
- 6) facies anterior et posterior dentium premolarium et molarium

7) lagamenta tendinum

8) vasa vasorum

9) flexura sacralis recti

10) ramus cutaneus lateralis nervi iliohypogastrici

3. Form adjectives with the help of suffixes in their dictionary form from the noun stems:

facies, ei f gaster, tris

f oesophagus, i m

musculus, i m os,

ossis n

Literature:

п/ №	Name	Author	Year, place of edition	number	
				In the library	At the chair
1	2	3	4	5	6
The main literature					
1	Latin and medical terminology	Chernjavskii M.N.	M.: Shiko 2015	100	5
2	Latin and pharmaceutical	Chernjavskii M. N.	M.: ГЭОТАР -Медиа,	27	

	terminology		2014		
3	Латинский язык и фармацевтическая терминология: учебное пособие	Зуева Н.И., Зуева И.В., Семенченко В.Ф.	М: ГЭОТАР -Медиа, 2012		
4	Латинский язык для педиатрических факультетов: учебное пособие	Нечай М.Н.	М.: Кнорус, 2013	100	5
Additional literature					
1.					
1	Латинский язык и фармацевтическая терминология: учебное пособие	Зуева И.В., Зуева Н.И., Семенченко В.Ф.	М.: ГЭОТАР -Медиа, 2008	10	4
2.	Толковый латинско - русский словарь кардиологических терминов.	Кочкарева А. Г., Новодранова В. Ф.	М.: ГЭОТАР -Медиа, 2008	7	4
3.	Латинский язык: учебное пособие	Бухарина Т. Л.	М.: ГЭОТАР -Медиа, 2015	50	

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Healthcare ministry of the Russian Federation

Department of Foreign Languages

TRAINING MATERIALS FOR THE TEACHERS FOR THE DISCIPLINE

“LATIN FOR FOREIGN STUDENTS”

(Clinical Terminology)

the main professional educational programme of higher education – specialty
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Vladikavkaz

Clinical Terminology

Topic 1

**«Some general notions of word formation: structure of a word, morphim:
word composition structure – formative (motivating) and derivative stems.
Term element (TE).Types of word formation».**

General information about word formation: word parts, morpheme: word formation structure. Medical terms. Component elements. Clinical terms. Word formation.

I. The aim of the lesson:

Educational

- To form new theoretical knowledge on the theme;
- To form practical skills;

Concrete tasks:

A student should know:

1. Clinical terminology as a language of Medicine.
3. Ways of word formation.
4. Defining the basic parts.
5. Greek and Latin suffixes

A student should be able to:

1. To analyze medical terms.
2. To define the stem of a word.
3. To define suffixes in the structure of terms and give their meaning.

The content

Although medical terms have been drawn from many languages, a large majority are from Greek and Latin.

The long and formidable sounding medical terms are a combination of words, which describe parts of the body, a function, or a condition. The basic terms occur repeatedly in various combinations. A knowledge of the meaning of the roots, prefixes, and suffixes enables the student to analyze the medical terms into component parts. This is of the greatest aid in learning to understand the vocabulary of medicine. Some names of diseases given by the ancients and still used today are, in many instances, simply descriptions of the outstanding symptoms; *for example, hydro-phobia-fear of water-for rabies.*

1. It is estimated that about three-fourths of the English medical terminology is of **Greek origin**. The main reason for this is that the Greeks were the founders of rational medicine in the golden age of Greek civilization in the 5th Century B.C. The Hippocratic School and, later on, Galen (the Greek from Asia Minor who lived in Rome in the 2nd century A.D.) formulated the theories, which dominated medicine up to the beginning of the 18th Century. The Hippocratic's were the first to describe diseases based on observation, and the names given by them to many conditions are still used today, *for example, arthritis, nephritis, pleuritis (pleurisy).*
2. The 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 impossible 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.
3. The third reason for using the classical roots is that they form an international language, easily understood by anyone familiar with the subject matter.

The terminology of the modern medicine is the most complicated terminological system of the modern science. The total amount of medical terms remains unknown, but its estimated amount exceeds one million terms. You realize that it is impossible to learn one million words, even for an intelligent person, because we use in our native language only several thousands words. Our course will help you to understand and use about fifty thousand main medical terms. This course teaches you how medical terms are ‘built’ or ‘put together’ instead of just memorizing lots of medical words and their meanings. You will learn to recognize the meaning of a medical term by dividing the word into its three basic component parts: the *prefix*, *root* and *suffix*. By knowing the meanings of the prefixes, suffixes, and root words, you can easily figure out the meaning of a medical term.

For example, if you see a medical term containing the root word ‘cardi’ and the suffix ‘itis’, you know that the term has to do with an ‘*inflamed*’ (itis) ‘*heart*’ (cardi). This technique of *word building* is a simple and straightforward way to learn medical terminology without long hours of memorizing the medical vocabulary. • You will learn Latin and Greek terminological elements.

- You will be able to figure out unfamiliar words by recognizing their building blocks from which they are constructed.
- You will be able to construct many words correctly by learning to put these building blocks together in the proper way.
- You will be able to determine the meanings of thousands of words that you have never seen before and which are used in medicine.

Greek and Latin medical terms can be broken down into one or more word parts. For simplicity in explanation, let's say that there are four possible word parts, and any given medical term may contain one, some, or all of these parts:

1. **Root terminological elements** (a shorthand notation “**root**”)
2. **Final terminological elements** (a shorthand notation “**suffixes**”)

3. Prefixes

4. Combining vowels

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*.

Hence, **pericarditis** is *an inflammation of the area surrounding the heart*, or an inflammation of the outer layer of the heart, anatomically known as the pericardium. Medical terms always consist of at least one root, although they may contain more. The root of a word is that part which contains the essential meaning of the word. An example of this was seen above in the term **pericarditis**. The root of the word **-card** - refers to the heart, so any prefix or suffix added to the root (card) will only function to add to the specificity of that word. An example of this would be the prefix **brady**, which means *slow*. If "brady" is added to the root "card", the term **bradycard** - which roughly means *slow heart* - is created. Then, if the suffix **ia** - which means *abnormal state* - is added to "bradycard", the medical term **bradycardia** is formed. The translation of bradycardia (**brady-card-ia**) is **slow - heart - abnormal state**, or the abnormal state of a slow heart rate.

Linking or Combining Vowels: As was discussed above, a medical term must have at least one root, but may not have a prefix and/or a suffix. An example of this is the term **sternocleidomastoid**, which is a muscle that has attachments at

the sternum, the clavicle, and the mastoid. The term **sternocleidomastoid** can be divided into three parts (three roots, in this case): **stern - o - cleid - o - mastoid**. Notice that there are vowels between the three roots. These are **linking or combining vowels**, which serve to make a term easier to pronounce. The vowel used most of the time is **o**, but other vowels such as **i** and **a** are also used. Combining vowels are often used between roots and suffixes or roots and other roots, but they are NOT used between prefixes and roots.

4. LEARNING TO READ A MEDICAL TERM

When you look at a medical term and attempt to decipher its meaning you begin with the suffix, move to the prefix (if present) and then the root word.

For example: When trying to understand the word ***pericarditis*** you would identify ***itis*** (meaning inflammation), then ***peri*** (meaning around) and then ***card*** (meaning heart). Therefore, this word means inflammation around the heart.

Let's try another one: for example: ***leukocytopenia*** -***penia*** (meaning *decrease*), then ***leuk/o*** (meaning white) and finally ***cyt/o*** (meaning cell). Therefore, this word means *a decrease in white cells*.

Remember the following suffixes		
Suffixes of nouns		
I. diminutive		
-ul	globulus	ball
-cul	tuberculum	tubercule
-ol	foveola	fovea
-ell	lamella	platelet
-ill	mamella	nipple
II. action		
-io	transplantatio	transfer

III. subject(<i>organ, instrument</i>) <i>producing effect</i>
-or sphinctersqueezer
-er
IV. <i>the result of the action</i>
-ura incisuraincisure
V. <i>Suffixes of adjectives</i>
a) characterizedandrichinsome qualitysigned by stem,:
-os mucosusmucous
b) Belonging or relating to what is called the basis
-al vertebralis vertebral
-ar clavicularisclavicular
-ic thoracicus thoracic
-e pharyngeuspharyngeal
-in palatinuspalatine
c) Similar to what is called the basis
-die (rp.) mastoideusmastoid
-form (лат.) fungiformismushroom like
d) Carrying what is called the basis
-fer seminiferseminal
-phor (rp.) oophorusoviparous
e) -Generating, causing what is called the basis - generated, due to what is called the basis
-gen cancerogenusCancer-causing

VI. TASK FOR INDEPENDENT WORK.

1. Define suffixes and give their meaning:

tubula, ossiculum, fractura, depressor, amputatio, cardiogenus, apicalis, urinarius, tendinosus, palatinus, laryngeus, deltoideus, gluteus, cruciformis

2. Match the following:

uterinusdrum
 pterygoideusbridle
 resectionmushroomlike
 fossulauterine
 frenulumfovea
 tympanicusdeleting
 fungiformisalaris

Form the terms with the meaning:

1) Inflammation of stomach - gaster, tris f
Joints arthr-

liverhepar, atis n

2) New formations

Fibrous connective tissue

fibr-

musclemy-

glandaden-

muscle tissue my-

3) Noninflammatory diseases

Joints arthr-

skindermat-

paradontaparodont-

Vocabulary

abscessus, us m	abscess
acutus, a, um	acute
benignus, a, um	benignus
cancer, cri m	cancer
cancerosus, a, um	cancerous
caries, ei f	caries
chronicus, a, um	<i>chronical</i>
colica, ae f	(Greek.) colic
coma, atis n	(Greek.) coma
comatosus, a, um	comatosus
cysta, ae f	(греч.)cysta
cystosus, a um	cystic
diabetes, ae m	(Greek.) diabetis
diabeticus, a, um	diabetic
diffusus, a, um	diffuse (разлитой, распространенный)
eczema, atis n	(Greek.) eczema
fractura, ae f	fractures
gangraena, ae f	(Greek.) gangrene
gangraenosus, a, um	gangrenous
glaucoma, atis n	glaucoma
hernia, ae f	hernia
hernialis, ae f	herniac

icterus, i m	(Greek.) jaundice
ileus, i m	(Greek.)intestinal obstruction
infantilis, e	infantile
infectio, onis f	infection
infectiosus, a, um	infectious
inflammatio, onis f	inflammation
juvenilis, e	jouvenile
malignus, a, um	malignant
morbus, i m	desease
oedema, atis n	aedema
paralysis, i f	(Greek)paralasis
paralyticus, a, um	paralitic
paresis, is f	(Greek) paresis
pneumonia, ae f	(Greek.) pneumonia
senilis, e	senilis
spasmus, i m	(Greek.) spasm
spasticus, a, um	(Greek.) spasmic
trauma, atis n	(Greek) trauma
traumaticus, a, um	traumatic
ulcus, eris n	ulcer
ulcerosus, a, um	ulceric
varix, icis m/f	Venous node
varicosus, a, um	varicousis
volvulus, i m	volvulus

Topic 2

Clinical terminology. Combining roots. Free and dependent, premier and final medical terms. Greek and Latin component elements. Types of clinical terms. Component elements in the in the structure of a term.

Clinical terminology. Combining roots. Free and dependent, premier and final medical terms. Greek and Latin component elements. Types of clinical terms. Component elements in the structure of a term.

I. The aim of a lesson:

- To form new theoretical knowledge;
- To form practical skills;

Concrete tasks:

A student should know:

1. Definition of clinical terminology as a language of medicine.
2. The final aim of studying the theme.
3. The main ways of word formation.
4. Defining the component element.
5. Defining Greek and Latin compounds.
6. Types of medical terms.
7. Greek and Latin compounds denoting parts of body and organs.
8. Greek compound elements denoting science, methods of diagnostic examination, disease, treatment, illness and sufferings.

A student should be able to:

1. To analyze terms
2. To define stems.
3. To define Greek and Latin doublets and combining clinical elements and give their meaning.

The content:

II. ROOTS AND SUFFIXES USED IN THE GREEK AND LATIN MEDICAL TERMS

ROOTS

<i>Greek and Latin roots</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
angi-; vas-	angi-	blood vessel	<i>angiogramma</i>
bio-; vit-	bio-	life	<i>biologia</i>
cardi-; (-cardia)	cardi-	heart	<i>cardiologia</i>
cyt-; (-cytus)	cyt-; -cyte	cell	<i>adenocytus</i>
cyst-	cyst-	urinary bladder; sac of fluid	<i>cystectomy</i>

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cholecyst-	cholecyst-	gallbladder	<i>cholecystotomy</i>
kerat-	kerat-	cornea; horny	<i>keratotomy</i>
mast-; (-mastia); mamm-	mast-; -masty	breast	<i>mastography</i>
encephal-	encephal-	brain	<i>encephalogramma</i>
gastr-; (-gastria)	gastr-	stomach	<i>gastrostomy</i>
colp-	colp-	vagina	<i>colpectomy</i>
enter-	enter-	small intestine	<i>gastroenterologia</i>
physi-	physi-	nature	<i>physiotherapy</i>

SUFFIXES

<i>Greek and Latin suffixes</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
-graphia	-graphy	recording; X-ray examination	<i>angiography</i>
-gramma	-gram	record; X-ray film	<i>angiogramma</i>
-ectomy	-ectomy	removal; resection; to cut out	<i>cystectomy</i>

-logia	-logy	science; study	<i>biologia</i>
-pathia	-pathy	any disease; disease process	<i>enteropathia</i>
-tomia	-tomy	cutting; incision; section	<i>gastrotomia</i>
-therapia	-therapy	treatment	<i>physiotherapia</i>

III.EXERCISES

1.Build up clinical terms with the given roots and suffixes, explain their meaning:

E.g.: When you join the root *gastr(o)-* with the suffix *-pathia* you get the term *gastropathia* which means “disease process of the stomach”.

- *cardi(o)-(-graphia;-gramma;-pathia;-logia);*

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- *angi(o)- (-pathia;-graphia;-logia;-gramma);*
- *cholecyst(o)- (-pathia;-tomia;-ectomy;-graphia;-gramma);*
- *mast(o)-;mamm(o)-(-graphia;-ectomy;-gramma);*
- *cyst(o)- (-graphia;-tomia;-ectomy;-gramma);*
- *encephal(o)- (-pathia;-gramma;-graphia).*

2.Explain the meaning of the following terms:

1)gastrectomia
gastrotomia

3)keratectomia
keratotomia

5)cytologia
cytogramma

2) angiogramma
angiologia
angiopathia
angiographia
angiocardiographia

4) cystectomia
cystogramma
cystographia
cystotomia

6) colpotomia
enteropathia

3. Give the Greek & Latin variants and explain the meaning of the following terms:

angiogram; cholecystotomy; gastrectomy; colpotomy; encephalogram; enteropathy; cytology; cardiogram; mastopathy; angiology; keratectomy; biology; gastrotomy; cholecystectomy; cytogram; mastectomy

4. Give the Latin spelling of the terms; explain their meaning:

biology; cystography; angiopathy; keratectomy; gastrotomy; colpotomy; enteropathy; mammogram; encephalography; cytogram; cystectomy; cardiology; cholecystogram; keratectomy

5. Form the Greek & Latin clinical terms according to the meaning:

•disease of vessels;

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•science of cells;

•removal of stomach;

•science of natural vital processes in the human body;

•disease of small intestine;

•X-rayexamination of heart;

•X-rayfilm of brain;

•X-rayexamination of urinary bladder;

•removal of cornea;

•cutting of vagina;

•X-rayfilm of gallbladder;

•X-rayfilm of heart;

•science of life;

•disease of breast;

•science of blood vessels.

Topic 3

Clinical terminology. Word formation. Suffixes –osis, -iasis, -itis, -oma, -ismus in clinical terminology. Greek and Latin doublets and single terms

Clinical terminology. Word formation. Suffixes –osis, -iasis, -itis, -oma, -ismus in clinical terminology.

I. Duration of the lesson 2 hours

II. The aim of the lesson:

- To form new theoretical knowledge;
- To form practical skills in independent search of information;

Concrete tasks:

Студент должен знать:

1. To define clinical terminology
2. The final aim.
3. The main ways of word formation.
4. Defining of a clinical term and Greek and Latin dublets.
5. The meaning of clinical suffixes –osis, -iasis, -itis, -oma, -ismus.
6. Greek and Latin names of organs and tissues.
7. Greek clinical terms of therapeutical and surgical methods of treatment, pathological changes in organs and tissues.

A student should be able to:

1. To make morphological analysis of terms.
2. To determine clinical suffixes and give their meaning.

I. ROOTS AND SUFFIXES USED IN THE GREEK AND LATIN MEDICAL TERMS

ROOTS

<i>Greek and Latin roots</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
cheil-; (-cheilia)	cheil- (-cheilia)	lip	<i>cheilōsis</i>
derm-; dermat-;	derm-; dermat-;	skin	<i>dermatologia</i>

(-dermia)	-dermia		
hyster-; metr-	hyster-	uterus	<i>hysterotomia</i> <i>metrotomia</i>
nephr-	nephr-	kidney	<i>nephropexia</i>
oste-	oste-	bone	<i>osteologia</i>
proct-	proct-	anus and rectum	<i>proctectomy</i>
pyel-	pyel-	renal pelvis	<i>pyelography</i>
rhin-	rhin-	nose	<i>rhinopathia</i>
spondyl-	spondyl-	vertebrae; backbone	<i>spondylōsis</i>
stomat-	stomat-	mouth	<i>stomatitis</i>

SUFFIXES

<i>Greek and Latin suffixes</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
-genēsis	-genesis	origin; cause	<i>pathogenēsis</i>
-gēnus,a, um	-genic; -genous	developing from inner state; to be the result of	<i>gastrogēnus</i>
-ītis	-itis	inflammation	<i>dermatitis</i>
-ōma	-oma	tumour; swelling	<i>angiōma</i>
-ōsis	-osis	abnormal condition; disease	<i>keratōsis</i>
-pexia	-pexy	fixation	<i>enteropexia</i>
-scopia	-scopy	internal examination	<i>gastroscopia</i>

PREFIXES

<i>Greek and Latin prefixes</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
endo-	endo-	within; in	<i>endometritis</i>
para-	para-	beside; near	<i>parametritis</i>
peri-	peri-	surrounding (outer)	<i>perinephritis</i>

II.EXERCISES

1. Build up clinical terms with the given roots and suffixes, explain their meaning:

- (o)scopia(gastr-;cholecyst-;colp-;cyst-;stomat-;rhin-;cyt-;proct-);
- (o)pexia(hyster-;nephr-;proct-;enter-);
- (o)pathia(rhin-;spondyl-;nephr-;oste-;cholecyst-;encephal-;angi-;mast-;cardi-);
- itis(colp-;nephr-;proct-;cholecyst-;kerat-;pyel-;dermat-;cheil-;stomat-;rhin-;encephal-;mast-;spondyl-);
- para- (-metritis;-nephritis;-proctitis);
- endo- (-genus;-scopia;-metritis;-cardium;-carditis).

2. Explain the meaning of the following terms:

- | | |
|-----------------------|-----------------|
| 1) angiocholecystitis | 2) nephritis |
| angioma | nephrectomia |
| angiomatosis | nephropathia |
| angiopathia | nephroma |
| angiitis | nephropexia |
| angiologia | nephropyelitis |
| | nephrosis |
| | nephrotomia |
| 3) pyelographia | 4) dermatitis |
| pyelocystitis | dermatologia |
| pyelitis | dermatoma |
| pyelonephritis | dermatosis |
| pyelotomia | |
| 5) pathologia | 6) osteogenesis |
| biologia | osteologia |
| osteologia | osteoectomia |
| proctologia | osteoma |
| nephrologia | osteopathia |
| stomatologia | osteotomia |
| cardiologia | ostitis |
| cytologia | endosteum |
| angiologia | |

3. Give the Greek & Latin variants and explain the meaning of the following terms:

endoscopy; osteotomy; endometritis; endocardium; endocarditis; metritis; metropathy; dermatology; spondylotomy; nephrogenic; nephropathy; osteocytoma; nephropexy; pyelography; proctoscopy; gastroscopy; enteropexy; spondylopathy; encephalopathy; proctectomy; keratosis; osteology; keratoma; nephroma; osteopathology; spondilitis.

4. Give the Latin spelling of the terms; explain their meaning:

nephrology; endogenous; nephropyelography; colposcopy; metrography; angiitis; angiocardigram; spondylosis; osteopathy; stomatology; stomatoscopy;

cholecystopexy; osteoma; osteogenesis; gastrogenic; dermatology; rhinopathy; perinephritis; endometritis; gastrectomy; nephrogram; mastectomy; osteocytes; spondylogram; dermatoscopy.

5. Form the Greek & Latin clinical terms according to the meaning:

- inflammation of the tissue surrounding the heart
- internal examination of nose
- fixation of kidney
- removal of bone
- inflammation of uterus mucous
- science of skin
- cutting of uterus
- removal of anus and rectum
- inflammation of renal pelvis and urinary bladder
- disease of bones
- abnormal condition of skin
- inflammation of lips

- fixation of anus and rectum
- removal of kidney
- disease of uterus
- inflammation of vertebrae
- internal examination of oral cavity
- inflammation of nose
- tumour of kidney

Sample Test

Explain the meaning of the following terms:

1) angiocholecystitis

angioma

angiomatosis

angiopathia

angiitis

angiologia

2) nephritis

nephropathia

nephrectomia

nephrosis

nephrotomia

nephropexia

nephropyelitis

3) pyelographia

pyelocystitis

pyelitis

pyelonephritis

pyelotomia

5) pathologia

biologia

proctologia

nephrologia

stomatologia

angiologia

6) osteogenesis

osteologia

osteologia

osteoma

osteoelectomia

osteotomia

osteopathia

2. Form the Greek & Latin clinical terms according to the meaning:

- inflammation of the tissue surrounding the heart
- internal examination of nose
- fixation of kidney
- removal of bone
- science of skin

- cutting of uterus
- removal of anus and rectum
- inflammation of renal pelvis and urinary bladder
- abnormal condition of skin

3. Explain their meaning:

nephrology; nephrography; colposcopy; metrography; angiitis; spondylosis; stomatology; cholecystopexy; osteoma; osteogenesis; dermatology; rhinopathy; perinephritis; endometritis; gastrectomy, mastectomy; osteocytes; spondylogram; dermatoscopy.

Topic 4

Clinical Terminology. Word formation. Prefixation. Prefix and suffix derivatives. Frequently used Greek and Latin prefixes

Clinical terminology.Word formation.Prefixes.Derivatives

I. The duration of the lesson 2 hours

II.The aim:

Educational

- To form new theoretical knowledge;
- To form practical skills in independent search of information;

Concretetasks:

A student should know:

1. To define clinical terminology
2. The final aim.
3. The main ways of word formation.
4. Defining of a clinical term and Greek and Latin dublets.
5. The meaning of clinical suffixes prefixes

A student should be able to:

1. To make morphological analysis of terms.
2. To define clinical prefixes

The content

Greek and Latin medical terms can be broken down into one or more word parts. For simplicity in explanation, let us say that there are four possible word parts, and any given medical term may contain one, some, or all of these parts:

1. **Root terminological elements** (a shorthand notation “**root**”)

2. **Final terminological elements** (a shorthand notation “**suffixes**”)

3. **Prefixes**

4. **Combining vowels**

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*.

Hence, **pericarditis** is *an inflammation of the area surrounding the heart*, or an inflammation of the outer layer of the heart, anatomically known as the pericardium. Medical terms always consist of at least one root, although they may contain more. The root of a word is that part which contains the essential meaning of the word. An example of this was seen above in the term **pericarditis**. The root of the word –**card** - refers to the heart, so any prefix or suffix added to the root (card) will only function to add to the specificity of that word. An example of this would be the prefix **brady**, which means *slow*. If "brady" is added to the root "card", the term **bradycard** - which roughly means *slow heart* - is created. Then, if the suffix **ia** - which means *abnormal state* - is added to "bradycard", the medical term **bradycardia** is formed. The translation of bradycardia (**brady-card-ia**) is **slow - heart - abnormal state**, or the abnormal state of a slow heart rate.

Linking or Combining Vowels: As was discussed above, a medical term must have at least one root, but may not have a prefix and/or a suffix. An example of this is the term **sternocleidomastoid**, which is a muscle that has attachments at the sternum, the clavicle, and the mastoid. The term **sternocleidomastoid** can be divided into three parts (three roots, in this case): **stern - o - cleid - o - mastoid**. Notice that there are vowels between the three roots. These are **linking or combining vowels**, which serve to make a term easier to pronounce. The vowel used most of the time is **o**, but other vowels such as **i** and **a** are also used. Combining vowels are often used between roots and suffixes or roots and other roots, but they are NOT used between prefixes and roots.

LEARNING TO READ A MEDICAL TERM

When you look at a medical term and attempt to decipher its meaning you begin with the suffix, move to the prefix (if present) and then the root word.

For example: When trying to understand the word **pericarditis** you would identify **itis** (meaning inflammation), then **peri** (meaning around) and then **card** (meaning heart). Therefore, this word means inflammation around the heart.

Let's try another one: for example: **leukocytopenia** -**penia** (meaning *decrease*), then **leuk/o** (meaning white) and finally **cyt/o** (meaning cell). Therefore, this word means *a decrease in white cells*.

Remember the following suffixes		
Suffixes of nouns		
I. diminutive		
-ul	globulus	ball
-cul	tuberculum	tubercule
-ol	foveola	fovea
-ell	lamella	platelet
-ill	mamella	nipple

II. action
-io transplantatio transfer
III. subject(<i>organ, instrument</i>) <i>producing effect</i>
-or sphinctersqueezer
-er
IV. <i>the result of the action</i>
-ura incisuraincisure
V. <i>Suffixes of adjectives</i>
a) characterizedandrichinsome qualitysigned by stem,:
-os mucosusmucous
b) Belonging or relating to what is called the basis
-al vertebralis vertebral
-ar clavicularisclavicular
-ic thoracicus thoracic
-e pharyngeuspharyngeal
-in palatinuspalatine
c) Similar to what is called the basis
-die (гр.) mastoideusmastoid
-form (лат.) fungiformismushroom like
d) Carrying what is called the basis
-fer seminiferseminal
-phor (гр.) oophorusoviparous
e) -Generating, causing what is called the basis - generated, due to what is called the basis
-gen cancerogenusCancer-causing

TASK FOR INDEPENDENT WORK.

1. Define suffixes and give their meaning:

tubula, ossiculum, fractura, depressor, amputatio, cardiogenus, apicalis, urinarius, tendinosus, palatinus, laryngeus, deltoideus, gluteus, cruciformis

2. Match the following :

uterinusdrum
pterygoideusbridle
resectionmushroomlike
fossulauterine
frenulumfovea
tympanicusdeleting
fungiformisalaris

Make up terms with the following meaning:

4) Inflammation of stomach - gaster, tris f
Joints arthr-

Liverhepar, atis n

5) New formations

Fibrous connective tissue

fibr-

Musclemy-

Glandaden-

Muscle tissue my-

6) Non inflammatory diseases

Joints arthr-

Skindermat-

paradontaparodont-

Topic 5

**Clinical terminology. Word formation. Greek and Latin dublet names of
Tissues, organs, secrets, gender and age. Single term elements denoting
functional pathological conditions and processes**

Clinical terminology. Word formation. Greek and Latin designations of tissue, organs, secrets, gender and age. Single clinical terms defining functional pathological processes and conditions.

I. Duration of the lesson 2 hours.

II. The aim of the lesson:

Educational

- To form new theoretical knowledge;
- To form practical skills in the search of information;
- To make morphemic and word forming analyses; select basic Greek and Latin prefixes and give their meanings.

Concrete tasks:

A student should know:

1. Definition of clinical terminology as medical sublanguage.
2. Final aim of studying the theme.

3. Main ways of word formation.
4. Defining clinical basic elements.
5. Greek and Latin designations of tissues, organs, secrets, gender and age
6. Single clinical elements defining pathological conditions and processes

Студент должен уметь A student should be able to:

1. Make analysis of a word
2. To define Latin and Greek prefixes.
3. To give the meaning of a term

The Content:

I. ROOTS AND SUFFIXES USED IN THE GREEK AND LATIN MEDICAL TERMS

ROOTS

<i>Greek and Latin roots</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
odont-; (-odontia); (-dientia)	odont-; -odontia; -dientia	tooth	<i>odontalgia</i>
ophthalm-; -ophthalmia	ophthalm-; -ophthalmia	eye	<i>ophthalmopathia</i>
ot-	ot-	ear	<i>otoscopia</i>
paed-; (-paedia)	ped-	child; children	<i>paediatrics</i>
phleb-	phleb-	vein	<i>phlebotomia</i>
phthisi-	phthisi-	tuberculosis	<i>phthisiatrics</i>
psych-	psych-	mind	<i>psychologia</i>
trich-; (-trichia)	trich-	hair	<i>trichopathia</i>

SUFFIXES

<i>Greek and Latin suffixes</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
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-alg; -algia	-algia	pain	<i>trichalgia</i>
-iāter; -iatria	-iatrīst; -iātrician -iātry; -iātria	physician; science about treatment	<i>paediater;</i> <i>paediatrica</i>
-plasia	-plasia	formation; development	<i>hyperplasia</i>
-rrhagia	-rrhagia	bleeding	<i>rhinorrhagia</i>
-rrhaphia	-rrhaphy	suturing	<i>metrorrhaphia</i>
-rrhoea	-rrhea	discharge; elimination	<i>rhinorrhoea</i>
-trophia	-trophy	nourishment; development	<i>dystrophia</i>

PREFIXES

<i>Greek and Latin prefixes</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
a-;an-	a-;an-	no; not; without	<i>aplasia</i>
dys-	dys-	malfunction; difficulty	<i>dysplasia</i>
hyper-	hyper-	above; excessive	<i>hyperplasia</i>
hypo-	hypo-	below; deficient	<i>hypoplasia</i>

ROOTS

<i>Greek and Latin roots</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
aesthesi-; -aesthesia	esthesi-; -esthesia	feeling; nervous sensation	<i>anaesthesiology</i>
brady-	brady-	slow	<i>bradycardia</i>
gynaec-	gynec-	woman; female	<i>gynaecology</i>
hist-	hist-	tissue	<i>histology</i>
hydr-	hydr-	water	<i>hydrophobia</i>
lip-	lip-	fat; lipid	<i>lipoma</i>
lith-;	-lith	stone;	<i>phlebolithus</i>

-lithus		calculus	
melan-	melan-	black	<i>melanuria</i>
onc-	onc-	tumour	<i>oncologia</i>
pyr-	pyr-	fever; heat	<i>pyrotherapia</i>
tachy-	tachy-	fast	<i>tachycardia</i>

SUFFIXES

<i>Greek and Latin suffixes</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
-penia	-penia	decreased number (in blood)	<i>leucocytopenia</i>
-pexia	-pexy	fixation	<i>nephropexia</i>
-phobia	-phobia	fear	<i>hydrophobia</i>
-plegia	-plegia	paralysis; palsy	<i>diplegia</i>

PREFIXES

<i>Greek and Latin prefixes</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
bi-;di-;	bi-;di-;	two	<i>didactylia</i>
mono-	mono-	one; single	<i>monophobia</i>

II.EXERCISES

1.Build up clinical terms with the given roots and suffixes, explain their meaning:

- hyper- (-keratosis;-mastia;-nephroma;-plasia;-trichosis;-trophia);
- hypo- (-plasia;-trophia;-gastrium;-thyreosis);
- dys- (-enteria;-trophia;-plasia;-keratosis);
- a-;an-(-trophia;-plasia;-ophthalmia;-trichia;-dentia;-cheilia);
- (o)rrhagia(ot-;metr-;proct-;gastr-;enter-;stomat-;ophthalm-;odont-;hyster-;cheil-;rhin-);

- trich(o)- (-pathia;-rrhoea;-osis;-algia);
- ot(o)- (-genus;-rrhagia;-scopia;-itis);
- phleb(o)- (-gramma;-graphia;-itis;-tomia;-ectomia;-rrhaphia);
- rhin(o)- (-scopia;-rrhagia;-rrhoea;-pathia;-itis;-algia).

2.Explain the meaning of the following terms:

1) psychologia psychiatria psychiater psychogenus psychopathia psychotherapia	2) phlebotomia phlebographia phlebogramma phlebitis
3) trichopathia trichalgia trichorrhoea trichosis atrichia	4) ophthalmologia ophthalmorrhagia endophthalmitis ophthalmoscopy anophthalmia
5) proctalgia odontalgia trichalgia gastralgia	6) otorrhoea otorrhagia otoscopy otogenous otitis otalgia

3. Give the Greek & Latin variants and explain the meaning of the following terms:

trichopathy; phlebotomy; pediatrician; otogenic; ophthalmology; hypoplasia; otoscopy; dystrophy; hyperkeratosis; phlebography; adentia; enteropexia; proctalgia; aplasia; psychogenic; atrophy; cheilorrhagia; rhinoscopy; phlebitis; trichalgia; psychiatry; otitis; enterorrhaphy; otorrhea; endophthalmitis; odontalgia; dysplasia; hysterorrhaphy; otorrhagia; rhinorrhea; phlebogram; stomatitis; psychopathy; metrography; proctorrhagia; hypotrophy; gastrorrhagia; acheilia; atrichia; gastritis; enterorrhagia.

4. Give the Latin spelling of the terms; explain their meaning:

phlebogram; psychotherapy; phlebotomy; odontoma; dystrophy; psychiatry; otogenic; hypertrophy; enterorrhaphy; phlebography; metrography; rhinorrhea; psychogenic; psychopathy; trichorrhea; otoscopy; angiocardiology; enteropathy; hypotrophy; ophthalmoscopy; encephalogram; cholecystotomy; mastopathy; trichopathy; nephropathy; phthisiatrist; stomatoscopy; dysentery.

5. Form the Greek & Latin clinical terms according to the meaning:

- study of tuberculosis
- incomplete development of an organ or tissue
- bleeding from ear
- toothache (pain)
- lack of hair
- inflammation of vein
- physician who treats children
- abnormal development
- science about treatment of mental disorders
- study of eye disorders
- bleeding from tooth
- decrease in size or wasting away of a cell, tissue, organ or part

6. Build up clinical terms with the given roots and suffixes, explain their meaning:

- tachy- (-cardia; -kinesia; -arrhythmia);
- hydr(o)- (-therapia; -phobia; -thorax; -rrhoea; -nephrosis; -cephalia; -metra; -myelia);
 - pyr(o)- (-mania; -therapia; -phobia; -genus);
 - (o)phobia (hydr-; gynaec-; toxic-; mono-);
 - di- (-dactylia; -plegia; -cheilia);
 - (o)pexia (nephro-; metr-; proct-; cyst-; col-);
 - (o)plegia (cyst-; ophthalm-; di-; mono-; cardiomyo-; gloss-);

•-(o)lithus(enter-;phleb-;ur-;rhin-;hepat-;nephr-).

7. Explain the meaning of the following terms:

1)melanuria melanodermia melanoma	2) histotherapia histologia histopathologia
3)bradYGlossia bradyarrhythmia bradycardia bradyaesthesia bradykinesia bradyphagia	4) pyrotherapia pyrophobia pyrogenus
5)hydrarthrosis hydrothorax hydrophobia hydrotherapia hydraemia hydrocephalia hydrometra hydroperitoneum hydropneumothorax	6) lipaemia lipoma lipuria lipodystrophia lipofibroma lipogenus

8. Give the Greek & Latin variants and explain the meaning of the following terms:

histology; anesthesia; gynecophobia; erythropenia; melanosis; bradycardia; hypogastrium; hypertrophy; hydrology; pyrogenic; pyuria; erythema; monodactyly; bilateral; esthesiology; oncotomy; gynecopathy; lipemia; diplegia; erythrocyturia; enterolith; nephrolithiasis; histoma; oncosis; chondrodystrophy; lipatrophy; gastroduodenostomy; otorrhagia; enteropexy; bradykinesia; monophobia; pyelotomy; lipopenia; toxicophobia; myorrhaphy; myogenic; myelogram; lipofibroma; periodontium; periostitis; oncocytoma; cystopyelogram.

9. Give the Latin spelling of the terms; explain their meaning:

hydrophthalmos; mammography; cancerophobia; glossoplegia; rhinolith;
glycemia; hydrometra; cytopenia; anesthesiology;
hydrocholecystis; angiography; glossorrhagia; colpexy; phlebolith;
melanoderma; monocytopenia; monomyoplegia; nephromegaly; mononeuritis;
gastropexy; dicheilia; dysentery; lipodystrophy; colostomy; cholelithiasis;
cardiotomy; chondrotomy; tachyphagia; cardiomegaly; bradyphagia;
hydrotherapy; urolith; cardiophobia; ophthalmoplegia; metropexy; parodontosis;
rhinopathy; gynecology.

10. Form the Greek & Latin clinical terms according to the meaning:

- excess of lipids in the blood
- paralysis (palsy) of the tongue
- fixation of the vagina
- particular type of white blood cell that has one nucleus
- producing (caused) by fever
- renal stone
- abnormally fast heart rate
- slowing of swallowing
- collection of fluid in the pericardial cavity
- fear of water
- branch of medicine that treats diseases of the genital tract in women
- benign tumour composed of fatty tissues
- dark pigment excreted in the urine
- study of tumours
- decreased number of erythrocytes
- palsy (paralysis) of the bladder

- fixation of the rectum
- one finger on the hand
- urinary stone
- abnormally slow heart action (slow pulse)
- use of water in the treatment of disease or injury
- producing fat
- microscopic study of tissues
- dark pigment in the skin
- palsy (paralysis) of one extremity•disease of hair
- abnormal increase of breast in size
- cutting of vein
- developing from tooth

Sample Test

1. Give the Greek & Latin variants and explain the meaning of the following terms:

trichopathy; pediatrician; ophthalmology; hypoplasia; dystrophy;
hyperkeratosis; phlebography; adentia; enteropexia; aplasia; psychogenic;
atrophy; cheilorrhagia; rhinoscopy; phlebitis; trichalgia; psychiatry; otitis;
enterorrhaphy; otorrhea; odontalgia; dysplasia; hysterorrhaphy; otorrhagia;
rhinorrhea; stomatitis; psychopathy; metrography; proctorrhagia; hypotrophy;
gastrorrhagia; acheilia; gastritis; enterorrhagia.

2. Explain the meaning:

hydrophthalmos; mammography; cancerophobia; glossoplegia; rhinolith;
glycemia; hydrometra; cytopenia; anesthesiology; hydrocholecystis;
angiography; glossorrhagia; colpopsy; phlebolith; melanoderma;
monocytopenia; monomyoplegia; nephromegaly; mononeuritis

3. Form the Greek & Latin clinical terms according to the meaning:

- excess of lipids in the blood
- paralysis (palsy) of the tongue
- fixation of the vagina
- particular type of white blood cell that has one nucleus
- producing (caused) by fever
- renal stone
- abnormally fast heart rate
- slowing of swallowing
- collection of fluid in the pericardial cavity
- fear of water
- branch of medicine that treats diseases of the genital tract in women
- benign tumour composed of fatty tissues
- dark pigment excreted in the urine
- study of tumours

Topic 6

«Clinical Terminology.Word formation. Single term elements, denoting different physiological properties, qualities, relations and other signes».Final lesson in Clinical terminology

Clinical terminology. Word formation. Single clinical terms, defining different physiological properties and other features.

The aim of the lesson:

Educational

- To form new theoretical knowledge;
- To form practical skills in the search of information;

Concrete tasks:

A student should know:

1. Definition of clinical terminology as medical sublanguage.
2. Final aim of studying the theme.
3. Main ways of word formation.
4. Defining clinical basic elements.
5. Greek and Latin designations of tissues, organs, secrets, gender and age
6. Single clinical elements defining pathological conditions and processes

A student should be able to:

1. Make analysis of a word
2. To define Latin and Greek prefixes.
3. To give the meaning of a term

The content

I. ROOTS AND SUFFIXES USED IN THE GREEK AND LATIN MEDICAL TERMS

ROOTS

<i>Greek and Latin roots</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
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dactyl-; -dactylia	dactyl-; -dactyly	fingers or toes	<i>dactylalgia</i>
gloss-; -glossia	gloss-; -glossia	tongue	<i>glossalgia</i>
gluc-; (glucos-); glyk-;	gluc-; (glucos-); glyc-	sugar	<i>glykaemia</i>
haem-; haemat-; -aemia	hem-; hemat-; -(a)emia	blood	<i>haematologia</i>
heter-	heter-	other; (opposite of homo) different kind, type	<i>heterogenous</i>
homo-	homo-	same	<i>homogenous</i>
macr-	macr-	large	<i>macrocephalia</i>
micr-	micr-	small	<i>microgastria</i>
neur-	neur-	nerve	<i>neurologia</i>

olig-	olig-	of small quantity	<i>oliguria</i>
phag- ; -phagia	phag-; -phagia	swallowing	<i>aphagia</i>
phon-; -phonia	phon-; -phonia	voice; sound	<i>dysphonia</i>
pneum-; pneumon-	pulmon-; pneumon-	lung; air	<i>pneumotomia</i>
poly-	poly-	many (according to quantity)	<i>polyuria</i>
splen-; -splenia	splen-; -splenia	spleen	<i>splenectomy</i>
ur-; -uria	ur-; -uria	urine; urinary tract	<i>anuria</i>

SUFFIXES

<i>Greek and Latin suffixes</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
-megalia	-megaly	enlargement	<i>splenomegalia</i>
-opia;	-opia;	vision;	<i>dysopia</i>

-opsia	-opsia	view	
-thermia	-thermia	heat	<i>hyperthermia</i>

ROOTS AND SUFFIXES USED IN THE GREEK AND LATIN MEDICAL TERMS

ROOTS

<i>Greek and Latin roots</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
aden-	aden-	gland	<i>adenōma</i>
arthr-	arthr-	joint	<i>arthropathia</i>
cephal-; -cephalia	cephal-; -cephaly	head	<i>cephalalgia; hydrocephalia</i>
chondr-	chondr-	cartilage	<i>chondrogenēsis</i>
cyan-	cyan-	blue	<i>cyanuria</i>
dacryocyst-	dacryocyst-	tear sac; lacrimal sac	<i>dacryocystitis</i>
erythr-	erythr-	red	<i>erythrocytus</i>
leuc-	leuc-; leuk-	white	<i>leucocytus</i>
my-; myos-	my-; myos-	muscle	<i>myalgia</i>
myel-	myel-	spinal cord; bone marrow	<i>myelitis</i>
orth-	orth-	straight	<i>orthopaedia</i>

py-	py-	pus	<i>pyuria</i>
tox-; toxic-	toxic-	poison	<i>toxicōsis</i>

SUFFIXES

<i>Greek and Latin suffixes</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
-kinesia	-kinesia	movement	<i>oligokinesia</i>

-stōma; -stomia	-stoma; -stomia	fistula; creation of an artificial opening	<i>gastrostōma;</i> <i>enterostomia</i>
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PREFIXES

<i>Greek and Latin prefixes</i>	<i>English word elements</i>	<i>Meaning</i>	<i>Examples of medical terms</i>
pan-	pan-	all; total	<i>panalgia</i>

II. EXERCISES

1. Build up clinical terms with the given roots and suffixes, explain their meaning:

- (o)megalia(cardi-;dactyl-;splen-;mast-);
- micr (o)- (-scopia;-glossia;-mastia;-gastria;-splenia;-cephalia;-ophthalmia);
- poly- (-uria;-vitaminosis;-neuritis);
- thermia(hyper-;hypo-);
- neur(o)-(-logia;-rrhaphia;-pathia;-osis;-tomia;-oma;-genus;-pathologia;-itis;-algia;-ectomy);
- haem (o)-;haemat(o)-(-uria;-logia;-angioma;-oma;-rrhagia;-gramma;-thorax;-genus).

2. Explain the meaning of the following terms:

- | | |
|------------------|-------------------|
| 1) haematogenous | 2) neuralgia |
| haematoma | neurectomia |
| haematologia | neurologia |
| haemothorax | neuropathia |
| haemogramma | neurorrhaphia |
| haemopericardium | neuropathologia |
| haemotherapy | neurosis |
| haemophthalmus | neuroma |
| haemangioma | |
| 3) splenectomy | 4) pneumothorax |
| splenitis | pneumohaemothorax |

splenotomia		pneumonectomy
splenorrhagia		pneumohydrothorax
splenopexia		pneumonia
microsplenia		pneumotomia
		pneumatosis
5) polytrichia	6)	glossalgia
polyuria		glossitis
polydactylia		glossopathia
polycythaemia		glossorrhaphia
polyneuritis		glossorrhagia
polycystosis		glossoplastica

3. Give the Greek & Latin variants and explain the meaning of the following terms:

oliguria; megalosplenia; glycemia; glossalgia; dystrophy; nephropathy; oligodontia; microsplenia; neurotomy; dysphonia; pneumatosis; dactylomegaly; hypothermia; pneumonia; dysopia; polyuria; hematoma; uremia; pneumonectomy; neuropathy; microglossia; hematogenous; gastrogenous; endogenous; gastrectomy; aphonia; dermatology; spondylopathy.

4. Give the Latin spelling of the terms; explain their meaning:

hypothermia; hypovitaminosis; uremia; microsplenia; oligocythaemia; glucosuria; hyperthermia; hemangioma; dysopia; hematogenic; glycemia; dactylalgia; hypoglossus; biopsy; osteodystrophy; polytrichia; phagocytosis; dysphagia;

dactylomegaly; aphagia; urogenous; pneumopericardium; pneumothorax; polydactylia.

5. Form the Greek & Latin clinical terms according to the meaning:

- disturbance of period discharge (menses)
- small spleen
- excessive discharge of urine

- mass of coagulated blood
- removal of nerve
- incomplete development of an organ or tissue
- disease of mind
- abnormal presence of glucose (sugar) in the urine
- disturbance of voice formation
- bleeding from ear
- cutting of lung
- retention of urine substances in the blood
- elevation of temperature
- tumour of spleen
- deficiency of blood in quality or quantity
- medical speciality related to the brain and nervous system
- small stomach
- lack of fingers or toes
- bleeding from eye
- abnormal thickening of cornea
- inflammation of the lung with consolidation and drainage
- examination by microscope
- excessive enlargement of lips
- difficult or painful urination
- fixation of small intestine
- nasal bleeding
- hairy tongue
- difficulty in swallowing

- congenitally small skull and small amount of brain tissue
- uterinebleeding

6. Build up clinical terms with the given roots and suffixes, explain their meaning:

- py(o)-(-dermia;-genus;-metra;-nephrosis;-ophthalmia;-rrhoea;-thorax;-pneumothorax;-pericardium);
- myel(o)- (-cytus;-itis;-genus;-gramma;-graphia;-oma;-osis);
- oste(o)-(-arthropathia;-arthrotomia;-oma;-itis;-arthritis;-chondritis;-genus;-dystrophia;-logia;-myelitis;-pathia;-tomia;-ectomy);
- tox-; toxic(o)-(-aemia;-genus;-logia;-osis;-dermia;-mania);
- leuc(o)- (-cytus;-cytosis;-derma;-oma;-gramma);
- my(o)-;myos-(-itis;-logia;-oma;-algia;-cardium;-cardiodystrophia;-cardiopathia;-genus;-opia;-tomia);
- ot(o)- (-genus;-rrhagia;-scopia;-itis);
- phleb(o)- (-gramma;-graphia;-itis;-tomia;-ectomy;-rrhaphia);
- rhin(o)- (-scopia;-rrhagia;-rrhoea;-pathia;-itis;-algia).

7. Explain the meaning of the following terms:

1)cyanosis	2)	adenitis
cyanuria		lymphadenitis
cyanodermia		adenoma
acrocyanosis		adenomyoma
cyanopsia		adenopathia
3)panalgia	4)	arthritis
panarthritis		arthralgia
pancarditis		arthrosis
panophthalmitis		arthropathia
panotitis		arthrotomia
panhysterectomy		polyarthritis
		arthroplastica

5) oligokinesia
dyskinesia
kinesitherapia
kinetosis

6)

haemarthrosis
cephalalgia
cephalhaematoma
cephalotomia
hydrocephalia

8. Give the Greek & Latin variants and explain the meaning of the following terms:

microglossia; cheilorrhagia; arthropathy; cyanuria; dacryocystectomy; leucocyte; pyoderma; panarthritides; otopyorrhea; polyarthritides; toxicology; panhysterectomy; myopia; orthopedics; oligokinesia; erythroderma; dysphagia; myalgia; psychiatrist; encephalogram; myeloma; leucogram; pyonephrosis; pneumonectomy; chondrotomy; dacryocystogram; orthodontist; erythrocyturia; chondrogenic; adenotomy; osteomyelitis; otoneurology; arthralgia; oligodactylia; parodontopathy; periostitis; rhinoscopy; proctalgia; microphonia.

9. Give the Latin spelling of the terms; explain their meaning:

myelopathy; myometritis; periosteoma; periphlebitis; polyadenitis; pyogenic; pyonephrosis; oligotrophy; chondropathy; chondrotomy; cheilorrhaphy; cephalomegaly; cephalothoracic; polydactyly; pyuria; microgastria;

encephalography; gastroenterostomy; gastrocolostomy; arthrochondritis; arthroophthalmopathy; pyoderma; toxicogenic; erythrokeratoderma; nephropylotomy; stomatoscopy; dacryopyorrhea; myelography; dysphagia; proctostoma; esophagostomy; rhinorrhea.

10. Form the Greek & Latin clinical terms according to the meaning:

- creation of an artificial opening of the stomach
- disease of cartilages

- inflammation of brain and spinal cord
- purulent inflammation of the kidney
- accumulation of harmful substances in the blood
- pain in the muscles
- developing from bone marrow
- any disease of joints
- increased count of white blood cells in the blood
- red blood cell
- blue coloration of the skin caused by the deficiency of oxygen and the excess of carbon dioxide in the blood
- benign tumour from cartilaginous tissue
- accumulation of fluid in the skull (water in the brain)
- head pain (headache)
- inflammation of lymph nodes
- removal of tear sac
- widespread, general inflammation of the heart
- disturbance of movement
- accumulation of pus in the pleural cavity
- study of the correction of the musculoskeletal system deformities
 - producing toxin
 - the middle and thickest layer of the heart wall
 - accumulation of blood in the joint cavity
 - appearance of white spots on the skin
 - skin inflammation with reddening, itching and desquamation

- blue coloration of the distal parts
- disturbance of cartilage nutrition
- glandular cell

Greek & Latin-English Clinical Dictionary

Greek & Latin English Meaning

-A-

acheilia	acheilia	lack of lips
acrocyanōsis	acrocyanosis	blue coloration of the distal parts
adenītis	adenitis	inflammation of a gland
adenocytus	adenocyte	glandular cell
adenōma	adenoma	benign epithelial tumour
adenomyōma	adenomyoma	benign tumour from smooth muscles with glandular elements
adenopathia	adenopathy	tumour or enlargement of lymph glands
adenotomia	adenotomy	removal of adenoids
adentia	adentia	lack of teeth
anaemia	anemia	deficiency of the blood in quality or quantity
anaesthesia	anesthesia	absence of feelings
angiītis	angiitis	inflammation of blood vessels
angiocardigramma	angiocardigram	results of X-ray examination of heart blood vessels
angiocardigraphia	angiocardigraphy	X-ray recording of the heart and vessels
angiocholecystītis	angiocholecystitis	inflammation of gallbladder vessels
angiogramma	angiogram	results of blood vessel X-ray examination
angiographia	angiography	X-ray recording of vessels
angiologia	angiology	study of blood vessels
angiōma	angioma	benign tumour composed of blood vessels
angiomatōsis	angiomatosis	multiple vessel tumours

angiopathia	angiopathy	disease of blood vessels
anophthalmia	anophthalmia	lack of eye balls
anuria	anuria	complete suppression of urine secretion in the kidney
aphagia	aphagia	inability to swallow
aphonia	aphonia	loss of voice
aplasia	aplasia	abnormal formation or development
arthralgia	arthralgia	feeling of pain in the joint
arthrītis	arthritis	inflammation of the joint
arthrochondrītis	arthrochondritis	inflammation of the joint and cartilage
arthropathia	arthropathy	disease of joints
arthrophthalmopathia	arthrophthalmopathy	disease of joints and eyes
arthroplastica	arthroplasty	plastic surgery of the joint
arthrōsis	arthrosis	any disease of joints
arthrotomia	arthrotomy	cutting (incision) of the joint
atrichia	atrichia	lack of hair
atrophia	atrophy	decrease in size or wasting away of a cell, tissue, organ or part
-B-		
bilaterālis	bilateral	on both sides
biologia	biology	study of life
biopsia	biopsy	removal of a segment of living tissue for pathological examination
bradyaesthesia	bradyesthesia	slowing of transmittence of sensoric feelings
bradyarrhythmia	bradyarrhythmia	disturbance of the heart activity (slowing)
bradycardia	bradycardia	abnormally slow heart action (slow pulse)
bradyglossia	bradyglossia	slowing of tongue movements
bradykinesia	bradykinesia	slowing of movements

bradyphagia	bradyphagia	slowing of swallowing
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-C-

cancerophobia	cancerophobia	fear of cancer
cardiologia	cardiology	study of the heart and heart function
cardiomegalia	cardiomegaly	enlargement of the heart
cardiomyoplegia	cardiomyoplegia	palsy (paralysis) of the heart
cardiopathia	cardiopathy	disease of the heart
cardiophobia	cardiophobia	fear of heart diseases
cardiotomia	cardiotomy	cutting (incision) of the heart
cephalgia (cephalalgia)	cephalgia (cephalalgia)	head pain (headache)
cephalhaematōma	cephalhematoma	blood clot in the brain of newborn
cephalomegalia	cephalomegaly	increased size of the head
cephalopathia	cephalopathy	disease of the brain
cephalotomia	cephalotomy	cutting (incision) of the brain
cheilitis	cheilitis	inflammation of lips
cheilorrhagia	cheilorrhagia	bleeding from the lip
cheilōsis	cheilosis	any disease of lips
cholecystectomy	cholecystectomy	removal of the gallbladder
cholecystītis	cholecystitis	inflammation of the gallbladder
cholecystogramma	cholecystogram	results of gallbladder X-ray examination
cholecystographia	cholecystography	X-rayrecording of the gallbladder
cholecystopathia	cholecystopathy	disease of the gallbladder
cholecystopexia	cholecystopexy	fixation of the gallbladder
cholecystoscopia	cholecystoscopy	internal examination of

		the
cholecystostōma	cholecystostoma	gallbladder
		artificial opening of the
cholecystostomia	cholecystostomy	gallbladder
		creation of an artificial
		opening of the gallbladder
cholecystotomia	cholecystotomy	cutting of the gallbladder
cholelithiāsis	cholelithiasis	disease with the presence
		of stones in the
		gallbladder
		and its ducts
chondrītis	chondritis	inflammation of cartilages
chondrodystrophia	chondrodystrophy	disturbance of cartilage
		nutrition
chondrogēnus	chondrogenous,	developing from the
	chondrogenic	cartilaginous tissue
chondrōma	chondroma	benign tumour from
		cartilaginous tissue
chondropathia	chondropathy	disease of cartilages
chondrosteodystrophia	chondrosteodystrophy	disturbance of
		cartilaginous and bone
		tissues nourishment
chondrotomia	chondrotomy	cutting (incision) of the
		cartilage
colostomia	colostomy	creation of an artificial
		opening of the colon
		inflammation of the
colpītis	colpitis	vagina
colpopexia	colpopexy	fixation of the vagina
		internal examination of
colposcopia	colposcopy	the
		vagina
colpotomia	colpotomy	cutting of the vagina
cyanodermia	cyanodermia	blue coloration of the skin
cyanopsia	cyanopsia	disturbance of vision:
		vision only in blue colour
cyanōsis	cyanosis	blueness of the skin
		caused by the deficiency

		of oxygen and the excess of carbon dioxide in the blood
cyanuria	cyanuria	violet coloration of the urine
cystectomy	cystectomy	removal of the urinary bladder
cystitis	cystitis	inflammation of the urinary bladder
cystogramma	cystogram	results of urinary bladder X-ray examination
cystographia	cystography	X-ray recording of the

		urinary bladder
cystopexia	cystopexy	fixation of the bladder
cystoplegia	cystoplegia	palsy (paralysis) of the bladder
cystopyelogramma	cystopyelogram	results of urinary bladder and renal pelvis X-ray examination
cystopyelographia	cystopyelography	X-ray recording of urinary bladder and renal pelvis
cystoscopy	cystoscopy	internal examination of the urinary bladder
cystostomia	cystostomy	creation of an artificial opening of the urinary bladder
cystotomia	cystotomy	cutting (incision) of the urinary bladder
cytogramma	cytogram	results of cell microscopic examination
cytologia	cytology	study of a cell
cytopenia	cytopenia	decrease in the number of cells in the blood
cytoscopy	cytoscopy	microscopic examination of the cell

-D-

dacryoadenalgia	dacryoadenalgia	feeling of pain in the tear gland
dacryoadenitis	dacryoadenitis	inflammation of the tear gland

dacryocystectomy	dacryocystectomy	removal of the tear sac
dacryocystitis	dacryocystitis	inflammation of the tear sac
dacryocystogramma	dacryocystogram	results of tear sac X-ray examination
dacryopyorrhoea	dacryopyorrhea	purulent discharge from the tear gland
dactylalgia	dactylalgia	feeling of pain in the fingers or toes
dactylomegalia (megalodactylia)	dactylomegaly (megalodactyly)	enlargement of fingers or toes
dermatitis	dermatitis	inflammation of the skin
dermatologia	dermatology	study of skin diseases
dermatōma	dermatoma	tumour of the skin
dermatoscopia	dermatoscopy	internal examination of the skin
dermatōsis	dermatosis	any disease of the skin
dicheilia	dicheilia	double lip
didactylia	didactyly	double finger (toe)
diplegia	diplegia	bilateral palsy (paralysis)
diplopia	diplopia	double vision
dysenteria	dysentery	painful intestines
dyskeratōsis	dyskeratosis	malfunction of the cornea
dyskinesia	dyskinesia	disturbance of movements
dysopia	dysopia	disturbance of vision
dysphagia	dysphagia	difficulty in swallowing
dysphonia	dysphonia	disturbance of voice formation
dysplasia	dysplasia	abnormal development
dystrophia	dystrophy	abnormal nourishment; disturbance of nourishment
dysuria	dysuria	difficult or painful urination

-E-

electrocardiogramma	electrocardiogram	recording of electrical activity of heartbeats
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electrocardiographia	electrocardiography	recording of activity and location of the heart
encephalītis	encephalitis	inflammation of the brain and meninges
encephalogramma	encephalogram	recording of electrical activity of the brain
encephalographia	encephalography	recording of the brain
encephalomyelītis	encephalomyelitis	inflammation of the brain and spinal cord
encephalopathia	encephalopathy	disease of the brain
endocardītis	endocarditis	inflammation of heart inner coat
endocardium	endocardium	endothelial (inner) lining of the heart
endogēnus	endogenous	normally occurring or existing within the body
endometrītis	endometritis	inflammation of uterine mucous coat
endophthalmītis	endophthalmitis	inflammation of internal eye coat
endoscopia	endoscopy	internal examination of mucous
endosteum	endosteum	medullary membrane of the bone
enterītis	enteritis	inflammation of the intestines
enterolithus	enterolith	intestinal stone
enteropathia	enteropathy	disease of the small intestine
enteropexia	enteropexy	fixation of the small intestine
enterorrhagia	enterorrhagia	small intestine bleeding
enterorrhaphia	enterorrhaphy	suturing of the small intestine creation of an artificial opening
enterostomia	enterostomy	of the small intestine
erythēma	erythema	redness of the skin produced by
erythroaemia	erythroemia	congestion of the capillaries disease with increasing of red blood cell count

erythrocytōsis	erythrocytosis	increased count of red blood cells in the blood
erythrocyturia	erythrocyturia	discharge of erythrocytes by urine
erythrocytus	erythrocyte	red blood cell
erythrodermia	erythrodermia	skin inflammation with reddening, itching and desquamation
erythrokeratodermia	erythrokeratoderma	disease accompanied by redness of horny skin layer
erythropenia	erythropenia	decreased number of erythrocytes
-G-		
gastralgia	gastralgia	feeling of pain in the stomach (stomachache)
gastrectomia	gastrectomy	removal of the stomach
gastrītis	gastritis	inflammation of stomach lining
gastrocolostomia	gastrocolostomy	creation of an artificial opening between stomach
gastroduodenostomia	gastroduodenostomy	and colon creation of an artificial opening between stomach and duodenum
gastroenterītis	gastroenteritis	inflammation of stomach and small intestine
gastroenterologia	gastroenterology	study of stomach and small intestine
gastroenterostomia	gastroenterostomy	creation of an artificial opening between stomach and small intestine
gastroesophagostomia	gastroesophagostomy	creation of an artificial opening between stomach and esophagus
gastrogēnus	gastrogenous, gastrogenic	developing from the stomach
gastropexia	gastropexy	fixation of the stomach

gastrorrhagia	gastrorrhagia	stomach bleeding
gastroscoπia	gastroscopy	internal examination of the stomach
gastrostōma	gastrostoma	artificial stomach opening
gastrostomia	gastrostomy	creation of an artificial stomach opening
gastrotomia	gastrotomy	cutting of the stomach
glossalgia	glossalgia	feeling of pain in the tongue
glossītis	glossitis	inflammation of the tongue
glossopathia	glossopathy	disease of the tongue
glossoplastica	glossoplasty	plastic surgery of the tongue
glossoplegia	glossoplegia	palsy (paralysis) of the tongue
glossorrhagia	glossorrhagia	bleeding from the tongue
glossorrhaphia	glossorrhaphy	suturing of the tongue
glossotomia	glossotomy	cutting of the tongue
glossotrichia	glossotrichia	hairy tongue
glucosuria	glucosuria	abnormal presence of glucose (sugar) in the urine
glykaemia	glycemia	presence of glucose (sugar) in the blood
gynaecologia	gynecology	the branch of medicine that treats diseases of the genital tract in women
gynaecopathia	gynecopathy	disease of the genital tract in women
gynaecophobia	gynecophobia	aversion to women
-H-		
haemangiōma	hemangioma	benign tumour from blood vessels
haemarthrōsis	hemarthrosis	accumulation of blood in the joint cavity
haematogēnus	hematogenic	developing from blood

haematologia	hematology	study of blood and blood-forming tissue
haematōma	hematoma	mass of coagulated blood (internal or under the skin)
haematometra	hematometra	accumulation of blood in the uterine cavity
haematuria	hematuria	blood in the urine
haemogramma	hemogram	results of blood examination
haemopericardium	hemopericardium	accumulation of blood in the pericardium
haemophthalmus	hemophthalmus	accumulation of blood in the eye
haemorrhagia	hemorrhagia	bleeding
haemotherapia	hemotherapy	treatment by using the blood
haemothorax	hemothorax	accumulation of blood in the thoracic cavity
hepatolithus	hepatolith	hepatic stone
heterogēnus	heterogenic	of different kind or type
histologia	histology	microscopic study of tissues
histōma	histoma	benign tumour from the tissue
histopathologia	histopathology	microscopic study of tissues injured by the disease
histotherapia	histotherapy	treatment by the introduction of tissue
homogēnus	homogenic	of the same kind or type
hydraemia	hydreemia	increased blood volume due to increased plasma volume
hydrarthrōsis	hydrarthrosis	accumulation of fluid in the joint
hydrocephalia	hydrocephaly	accumulation of fluid in the skull (water in the brain)
hydrocholecystus	hydrocholecystis	accumulation of fluid in the gallbladder
hydrologia	hydrology	study of water
hydrometra	hydrometra	accumulation of fluid in the uterine cavity

hydromyelia	hydromyelia	accumulation of fluid in the spinal cord
hydronephrōsis	hydronephrosis	enlargement and distention of the kidney due to block of urine outflow
hydropericardium	hydropericardium	accumulation of fluid in the pericardial cavity
hydroperitoneum	hydroperitoneum	accumulation of fluid in the abdominal cavity
hydrophobia	hydrophobia	fear of water
hydrophthalmus	hydrophthalmos	accumulation of fluid in the eye
hydropneumothorax	hydropneumothorax	accumulation of gas and fluid in the pleural cavity
hydrorrhoea	hydrorrhea	discharge of water from the tissues
hydrotherapia	hydrotherapy	use of water in the treatment of disease or injury
hydrothorax	hydrothorax	accumulation of noninfectious watery fluid in the pleural cavity
hyperaemia	hyperemia	excessive presence of blood in the part or organ
hyperkeratōsis	hyperkeratosis	abnormal thickening of cornea or horny skin layer
hyperlipaemia	hyperlipemia	an excess of lipids (fats) in the blood
hypermastia	hypermastia	abnormal increase of the breast in size
hypernephrōma	hypernephroma	abnormal enlargement of kidney tumour
hyperplasia	hyperplasia	abnormal increase in size of a tissue or an organ
hyperthermia	hyperthermia	elevation of temperature
hyperthyreōsis	hyperthyreosis	decreased function of the thyroid gland
hypertrichōsis	hypertrichosis	abnormal growth of hair
hypertrophia	hypertrophy	abnormal enlargement of a part or organ

hypogastrium	hypogastric	under the stomach, pertaining to
hypoglossus	hypoglossal; sublingual	the lower middle abdomen situated under the tongue
hypoglykaemia	hypoglykemia	deficiency of glucose in the blood
hypokinesia	hypokinesia	small quantity of movements
hypoplasia	hypoplasia	incomplete development of an organ or a tissue
hypothermia	hypothermia	decreasing of temperature
hypothyreōsis	hypothyreosis	increased function of the thyroid gland
hypotrophia	hypotrophy	abnormal decrease in size of a part or an organ
hypovitaminōsis	hypovitaminosis	deficiency of vitamins in the organism
hysterectomia	hysterectomy	removal of the uterus
hysteropathia	hysteropathy	disease of the uterus
hysteropexia	hysteropexy	fixation of the uterus
hysterorrhagia	hysterorrhagia	uterine bleeding
hysterorrhaphia	hysterorrhaphy	suturing of the uterus
hysterotomia	hysterotomy	cutting of the uterus

-K-

keratectomia	keratectomy	removal of the eye cornea
keratītis	keratitis	inflammation of the eye cornea
keratōma	keratoma	tumour of the eye cornea
keratōsis	keratosis	any disease of the eye cornea
keratotomia	keratotomy	cutting of the eye cornea
kinesiologia	kinesiology	study of body movements
kinesitherapia	kinesitherapy	treatment by motor regimen
kinetōsis	kinetosis	disease caused by passive movements

-L-

leukaemia (leucaemia)	leukemia	malignant disease of blood-forming organs
leucocytōsis	leucocytosis	increased count of white blood cells in the blood
leucocytus	leucocyte	white blood cell
leucoderma	leucoderma	appearing of white spots on the skin
leucogramma	leucogram	results of leucocytes studying
leucōma	leucoma	tumour of white tissue
leucopenia	leucopenia	decrease in the number of leukocytes in the blood
leucorrhoea	leucorrhea	whitish or yellowish viscid discharge from vagina or uterus
lipaemia	lipemia	decreased number of lipids in the blood
lipatrophia	lipatrophy	absence of fat tissue
lipodystrophia	lipodystrophy	nourishment
lipofibrōma	lipofibroma	disturbance of the fat tissue
lipogēnus	lipogenic	nourishment
lipōma	lipoma	benign tumour composed of fibrous tissue with lipocytes
		producing fat
lipopenia	lipopenia	benign tumour composed of fatty tissues
lipuria	lipuria	decrease in the number of lipids
lymphadenītis	lymphadenitis	lipid excretion by urine
		inflammation of lymph nodes

-M-

macrocephalia	macrocephaly	large skull and large amount of brain tissue
macrocheilia	macrocheilia	excessive enlargement of lips
macroglossia	macroglossia	large tongue

macromastia	macromastia	large breast
mammogramma	mammogram	results of breast X-ray examination
mammographia	mammography	X-rayrecording of the breast
mastectomy	mastectomy	removal of the breast
mastītis	mastitis	inflammation of the breast
mastomegalia	mastomegaly	enlargement of the breast
mastopathia	mastopathy	disease of the breast
melanodermia	melanoderma	dark pigment in the skin
melanōma	melanoma	dark pigment in a tumour
melanōsis	melanosis	excessive tissues (or organs) pigmentation caused by melanin deposits
melanuria	melanuria	dark pigment excreted in the urine
metrectomia	metrectomy	removal of the uterus
metrītis	metritis	inflammation of the uterus
metrographia	metrography	X-rayrecording of the uterus
metropathia	metropathy	disease of the uterus
metropexia	metropexy	fixation of the uterus
metrorrhagia	metrorrhagia	uterine bleeding
metrotomia	metrotomy	cutting of the uterus
microcephalia	microcephaly	small skull and small amount of brain tissue
microencephalia	microencephaly	congenitally small skull and small amount of brain tissue
microgastria	microgastria	small stomach
microglossia	microglossia	small tongue
micromastia	micromastia	small breast
microphthalmia	microphthalmia	small size of the eye
microphonia	microphonia	subsided sound on external examination (on palpation, on

		auscultation)
microscopia	microscopy	microscopic examination
microsplenia	microsplenia	small spleen
monocytopenia	monocytopenia	decreased number of monocytes
monocytus	monocyte	particular type of white blood cell that has one nucleus
monodactylia	monodactyly	one finger on the hand
monomyoplegia	monomyoplegia	paralysis of one muscle (palsy)
mononeuritis	mononeuritis	inflammation of one nerve
monopathia	monopathy	uncomplicated disease
monophobia	monophobia	fear of loneliness (solitude)
monoplegia	monoplegia	palsy (paralysis) of one extremity
myalgia	myalgia	pain in the muscles
myelaemia	myelemia	abnormally increased amount of myelocytes in the blood or tissues
myelītis	myelitis	inflammation of the spinal cord
myelocytus	myelocyte	nerve cell of the grey substance of the brain or spinal cord
myelogēnus	myelogenous	developing from the bone marrow
myelogramma	myelogram	X-rayrecording of the spinal cord
myelographia	myelography	results of spinal cord X-ray examination
myelōma	myeloma	malignant tumour of cells resembling those found in bone marrow
myelopathia	myelopathy	disease of the spinal cord
myelōsis	myelosis	any disease of the spinal cord
myocardiodystrophia	myocardiodystrophy	distrophic lesion of myocardium

myocardiopathia	myocardiopathy	disease of myocardium
myocardium	myocardium	middle and thickest layer of the heart wall
myogēnus	myogenous	developing from muscles
myogramma	myogram	X-rayrecordig of the electrical activity of muscles
myologia	myology	study of muscles
myōma	myoma	benign tumour of muscular tissue
myometrītis	myometritis	inflammation of uterine muscular membrane
myopathia	myopathy	any disease of the muscle tissue
myopia	myopia	light rays focus in front of the retina
myorrhaphia	myorrhaphy	suturing of the muscle
myosītis	myositis	inflammation of a voluntary muscle
myotomia	myotomy	cutting of a muscle
-N-		
nephrectomia	nephrectomy	removal of the kidney
nephritīs	nephritis	inflammation of the kidney
nephrogēnus	nephrogenous, nephrogenic	developing from the renal tissue
nephrogramma	nephrogram	results of kidney X-ray examination
nephrolithiāsis	nephrolithiasis	disease with the stones formation (calculi) in the kidney
nephrolithus	nephrolith	renal stone
nephrologia	nephrology	study of kidneys
nephrōma	nephroma	tumour of the kidney
nephromegalia	nephromegaly	enlargement of the kidney
nephropathia	nephropathy	disease of kidneys

nephropexia	nephropexy	fixation of the kidney
nephropyelitis	nephropyelitis	inflammation of the kidney and renal pelvis
nephropyelographia	nephropyelography	X-rayrecording of the kidney and renal pelvis
nephropyelostomia	nephropyelostomy	creation of an artificial opening between kidney and renal pelvis
nephrōsis	nephrosis	any kidney disease
nephrotomia	nephrotomy	cutting of the kidney
neuralgia	neuralgia	pain that extends along one or more nerves
neurectomia	neurectomy	removal of the nerve
neuritis	neuritis	inflammation of the nerve developing from nervous system
neurogenus	neurogenic	or tissue
neurologia	neurology	medical speciality related to the brain and nervous system
neurōma	neuroma	tumour from nervous cells
neuropathia	neuropathy	nervous disease
neuropathologia	neuropathology	the branch of medicine that treats disease of the nervous system
neurorrhaphia	neurorrhaphy	suturing of the nerve
neurōsis	neurosis	mental or psychiatric disorder characterized by fears, anxieties and compulsions
neurotomia	neurotomy	cutting of the nerve

-O-

odontalgia	odontalgia	feeling of pain in the tooth (toothache)
odontogēnus	odontogenic	developing from the tooth
odontōma	odontoma	tumour of tooth tissue
odontorrhagia	odontorrhagia	bleeding from the tooth
oesophagostomia	oesophagostomy	creation of an artificial opening

oligaemia	oligemia	of the esophagus deficiency of the blood
oligocytaemia	oligocytemia	insufficiency of blood cells
oligodactylia	oligodactylia	lack of fingers or toes
oligodentia	oligodentia	lack of teeth
oligokinesia	oligokinesia	small quantity of movements
oligomenorrhoea	oligomenorrhea	disturbance of menses
oligotrophia	oligotrophy	insufficient nutrition of the tissue or organ
oliguria	oliguria	deficient urinary secretion or infrequent urination
oncocytōma	oncocytōma	formation of tumour cells
oncologia	oncology	study of tumours
oncōsis	oncosis	formation of one or more tumours
oncotomia	oncotomy	cutting (incision) of the tumour
ophthalmologia	ophthalmology	study of eye disorders
ophthalmoplegia	ophthalmoplegia	palsy (paralysis) of the eye
ophthalmorrhagia	ophthalmorrhagia	bleeding from the eye
ophthalmoscopia	ophthalmoscopy	internal examination of the eye
orthodontus	orthodontist	physician who treats abnormalities of teeth
orthopaedia	orthopedics	study of the correction of the musculoskeletal system deformities inflammation of bones and joints
osteoarthrītis	osteoarthritis	
osteoarthropathia	osteoarthropathy	disease of bones and joints
osteoarthrotomia	osteoarthrotomy	cutting (incision) of the bone and joint
osteocondrītis	osteocondritis	inflammation of bones and cartilages
osteocytōma	osteocytōma	solitary bone cyst
osteocytus	osteocyte	bone cell

osteodystrophia	osteodystrophy	disturbance of bone tissue nourishment
osteoectomia	osteoectomy	removal of the bone
osteogenēsis	osteogenesis	formation of bone tissue
osteogēnus	osteogenous, osteogenic	developing from the bone
osteologia	osteology	study of bones
osteōma	osteoma	tumour made up of bone tissue
osteomyelītis	osteomyelitis	inflammation of the bone and bone marrow
osteopathia	osteopathy	disease of bones
osteopathologia	osteopathology	disease of bones pathologic changes
osteotomia	osteotomy	cutting (section) of the bone
ostītis	ostitis	inflammation of bones
otalgia	otalgia	feeling of pain in the ear (earache)
otītis	otitis	inflammation of the ear
otogēnus	otogenic	developing from the ear the branch of medicine
otoneurologia	otoneurology	studying ear nerves
otopyorrhoea	otopyorrhea	purulent discharge from the ear
otorrhagia	otorrhagia	bleeding from the ear
otorrhoea	otorrhea	discharge from the ear
otoscopia	otoscopy	internal examination of the ear
-P-		
paediater	pediatrician	physician who treats children disorders
paediatrica	pediatrics	study of children treatment widespread pain of the organism
panalgia	panalgia	
panaortītis	panaortitis	widespread, general inflammation of the aorta

panarterītis	panarteritis	widespread, general inflammation of the artery
pancardītis	pancarditis	widespread, general inflammation of the heart
panhysterectomy	panhysterectomy	removal of the uterus and uterine appendages
panophthalmītis	panophthalmitis	widespread, general inflammation of the eye ball
panotītis	panotitis	widespread, general inflammation of the ear
paracystītis	paracystitis	tissue inflammation near urinary bladder
parametrītis	parametritis	tissue inflammation near uterus
paranephrītis	paranephritis	tissue inflammation near kidney
paraproctītis	paraproctitis	tissue inflammation near anus and rectum
parodontopathia	parodontopathy	disease of parodontium
parodontōsis	parodontosis	any disease of parodontium
pathologia	pathology	study of changes in body tissues or organs as a result of disease
pericardītis	pericarditis	tissue inflammation surrounding heart
perimetrītis	perimetritis	tissue inflammation surrounding uterus
perinephrītis	perinephritis	tissue inflammation surrounding kidney
periodontium	periodontium	tissue surrounding and supporting the tooth
periosteōma	periosteoma	tumour of periosteum
periostītis	periostitis	inflammation of periosteum
periphlebītis	periphlebitis	inflammation of venous internal membrane
phagocytōsis	phagocytosis	the process when a cell ingests

		or engulfs other cells, microorganisms or foreign particles
phlebectomy	phlebectomy	removal of the vein
phlebītis	phlebitis	inflammation of the vein
phlebogramma	phlebogram	results of vein X-ray examination
phlebographia	phlebography	X-rayrecording of the vein
phlebolithus	phlebolith	venous stone
phleborrhaphia	phleborrhaphy	suturing of the vein
phlebotomia	phlebotomy	cutting of the vein
phthisiater	phthisiotherapist	physician who treats tuberculosis
phthisiologia	phthisiology	study of tuberculosis
physiologia	physiology	science of natural vital processes in the human body
physiotherapia	physiotherapy	natural treatment
pneumatōsis	pneumatosi	pathological accumulation of air or gases in any part of the organism
pneumohaemothora x	pneumohemothorax	accumulation of gas and fluid in the pleural cavity
pneumonectomia	pneumonectomy (pulmonectomy)	removal of the lung
pneumonia	pneumonia	inflammation of the lung with consolidation and drainage
pneumopericardium	pneumopericardium	accumulation of air in the pericardiac cavity
pneumothorax	pneumothorax	accumulation of gas or air in the pleural cavity
pneumotomia	pneumotomy	cutting (section) of the lung
polyadenītis	polyadenitis	inflammation of many glands
polyarthrītis	polyarthriti	inflammation of many joints

polycystōsis	polycystosis	abnormal condition accompanied with the formation of multiple cysts increase in the total cell mass of the blood
polycytaemia	polycytemia	
polydactylia	polydactylia	having more than normal number of fingers or toes
polyneurītis	polyneuritis	inflammation of many nerves
polytrichia	polytrichia	excessive hair growth on different parts of the body excessive discharge of the urine
polyuria	polyuria	increased amount of vitamins in the organism
polyvitaminōsis	polyvitaminosis	
proctalgia	proctalgia	rectum pain
proctectomy	proctectomy	removal of the anus and the rectum
proctītis	proctitis	inflammation of the anus and the rectum
proctologia	proctology	study of the anus and the rectum
proctopexia	proctopexy	fixation of the anus and the rectum
proctorrhagia	proctorrhagia	bleeding from the anus and the rectum
proctoscopia	proctoscopy	internal examination of the rectum
proctostōma	proctostoma	artificial opening of the rectum creation of an artificial opening
proctostomia	proctostomy	of the rectum
psychiater	psychiatrist	physician who specializes in the treatment of mental disorders
psychiatria	psychiatry	science about treatment of mental disorders
psychogēnus	psychogenic	psychological in origin, not having a physical basis

psychologia	psychology	study of the mind
psychopathia	psychopathy	disease of mind
psychōsis	psychosis	mental disturbance in which there is a personality disintegration and an escape into unreality
psychotherapia	psychotherapy	treatment by means of mental interference
pyaemia	pyemia	the presence of pus-forming organisms in the blood
pyelītis	pyelitis	inflammation of the renal pelvis
pyelocystītis	pyelocystitis	inflammation of the renal pelvis
pyelographia	pyelography	and urinary bladder X-ray recording of the renal pelvis
pyelonephrītis	pyelonephritis	inflammation of the renal pelvis and kidney
pyelotomia	pyelotomy	cutting of the renal pelvis
pyodermia	pyodermia	purulent infection of the skin
pyogēnus	pyogenic	producing pus
pyometra	pyometra	pus in the uterus
pyonephrōsis	pyonephrosis	purulent inflammation of the kidney
pyopericardium	pyopericardium	accumulation of pus in the pericardiac space
pyophthalmia	pyophthalmia	purulent inflammation of the eye ball
pyophthalmītis	pyophthalmitis	purulent inflammation of the eye
pyopneumothorax	pyopneumothorax	accumulation of gas and pus in the pleural cavity
pyorrhoea	pyorrhea	discharge of pus
pyothorax	pyothorax	accumulation of pus in the pleural cavity
pyrogēnus	pyrogenic	producing (caused by) fever

pyromania	pyromania	striving for setting fire
pyrophobia	pyrophobia	fear of heat
pyrotherapia	pyrotherapy	treatment by heat

pyuria	pyuria	pus in the urine
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-R-

rhinalgia	rhinalgia	feeling of pain in the nose
rhinītis	rhinitis	inflammation of the nose
rhinolithus	rhinolith	nasal stone
rhinopathia	rhinopathy	disease of the nose
rhinorrhagia	rhinorrhagia	nasal bleeding
rhinorrhoea	rhinorrhea	discharge from the nose
rhinoscopia	rhinoscopy	internal examinations of the nose

-S-

splenectomy	splenectomy	removal of the spleen
splenītis	splenitis	inflammation of the spleen
splenōma	splenoma	tumour of the spleen
splenomegalia (megalosplenina)	splenomegaly	enlargement of the spleen
splenopathia	splenopathy	disease of the spleen
splenopexia	splenopexy	fixation of the spleen
splenorrhagia	splenorrhagia	splenic bleeding
splenotomia	splenotomy	cutting (incision) of the spleen
spondylītis	spondylitis	inflammation of vertebrae
spondyloarthrītis	spondyloarthritis	inflammation of intervertebral joints
spondylogramma	spondylogram	results of vertebrae X-ray examination
spondylopathia	spondylopathy	disease of the backbone
spondylōsis	spondylosis	any disease of vertebrae

spondylotomia	spondylotomy	cutting (incision) of the vertebra
stomatītis	stomatitis	inflammation of the oral cavity
stomatologia	stomatology	study of the oral cavity
stomatorrhagia	stomatorrhagia	mouth bleeding
stomatoscopia	stomatoscopy	internal examination of the oral cavity

-T-

tachyarrhythmia	tachyarrhythmia	fast heart rate
tachycardia	tachycardia	abnormally fast heart rate
tachykinesia	tachykinesia	abnormally fast movements
tachyphagia	tachyphagia	fast swallowing
toxicoaemia	toxicoemia	accumulation of harmful substances in the blood
toxicodermia	toxicoderma	accumulation of harmful substances in the skin
toxicologia	toxicology	study of harmful substances and their effect on living organisms
toxicomania	toxicomania	drug abuse
toxicophobia	toxicophobia	fear of poisoning
toxicōsis	toxicosis	poisoning of the organism
toxigēnus	toxigenic	producing toxin
trichalgia	trichalgia	feeling of pain in the hair
trichatrophia	trichatrophy	atrophy of hair
trichopathia	trichopathy	disease of hair
trichorrhoea	trichorrhea	falling out of hair
trichōsis	trichosis	any disease of hair

-U-

uraemia	uremia	retention of urine substances in the blood
urogēnus	urogenous, urogenic	producing the urine

urolithus

urolith

urinary stone

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Department of Foreign Languages

TRAINING MATERIALS FOR THE TEACHERS FOR THE DISCIPLINE

“LATIN FOR FOREIGN STUDENTS”

(Pharmaceutical terminology)

**the main professional educational programme of higher education – specialty programme in the
specialty 31.05.03 Dentistry, approved on 30.03.2022**

Vladikavkaz

Pharmaceutical Terminology

Topic 1

General notion of pharmaceutical terminology. Nomenclature of medicines: name of drugs and their trademarks. International nonpatent names of drugs. General principles of composition of International nonpatent names of drugs.

Trade names of medicine.

General information about pharmaceutical terminology. Pharmaceutical forms. Component elements of drug names.

The aim of the lesson:

- To provide new theoretical knowledge;
- To provide practical skills in the given field;
- To provide practical skills in the work with scientific and scientific popular literature.

Concrete tasks:

A student should know:

- I. Definition of the pharmaceutical terminology
- II. Pharmaceutical forms
- III. Latin and Greek component elements of drug names
- IV. Word-formative and grammar structure of pharmaceutical terms

A student should be able to:

1. To Give definition to pharmaceutical terminology.
2. To define the word-formative and grammar structure of pharmaceutical terms
3. To translate word combinations in trade names of drugs from Latin into Russian

The content:

INTRODUCTION TO THE PHARMACEUTICAL TERMINOLOGY

The pharmaceutical terminology is the terminology used in Pharmacology (derived from the Greek “pharmacon” – “drug”). Pharmacology is the study of medicinal substances called pharmaceuticals. The International Drug Nomenclature amounts now to 400,000 drugs.

Learning objectives of this course of studies: At the end of the course of studies, you should:

1. Know how a prescription is written in Latin;
2. Write correctly in Latin one-word and multiword pharmaceutical terms;
3. Know Latin and Greek component elements of drug names;
4. Learn a certain amount of Latin drug names.

Main pharmaceutical terms

•Pharmaceutical form (drug form) – form of the drug suitable for a definite method of administration. These forms are divided into:

liquids (solutions, infusions, decoctions, tinctures, extracts, mucilages, emulsions, suspensions, mixtures and liniments),

semisolids (ointments, pastes, suppositories, plasters) and

solids (tablets, dragee, powders).

•Drug is any material or substance, whether natural or synthetic, that can be used to treat an illness, relieve a symptom or modify a chemical process in the body for a specific purpose. The names of drugs can be official or magistral:

Official (from Latin. officina – drugstore) drugs are drugs which are manufactured by the pharmaceutical industry and which have a standard content indicated in pharmacopoeias. For example: *tabulettae Cefalexini*, *unguentum “Lorindenum”*. Such drugs can have international nonpatent names and trade names:

o International nonpatent names are given by the WHO (World Health Organisation). These are mostly the chemical names of drugs. Under these names the drugs can be used in any country.

o Trade name (proprietary or brand name) is the copyrighted name assigned by the drug company making the drug and is followed by the symbol ®.

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Magistral drugs (from Latin *magister* -teacher) are called the drugs which are made at the direction of a physician.

•Medicinal substance is a chemical compound used as a drug. Medicinal substances are produced by chemical means.

•Drug preparation is a drug prepared in a definite pharmaceutical form.

II.MAIN PHARMACEUTICAL FORMS

You should learn the main pharmaceutical forms as follows (in a dictionary form!):

Liquids		
1.	Solutio, ōnis f	solution
2.	Mucilago, ĩnis f	mucilage
3.	Emulsum, i n	emulsion
4.	Suspensio, ōnis f	suspension
5.	Infusum, i n	infusion
6.	Decoctum, i n	decoction
7.	Tinctura, ae f	tincture
8.	Extractum, i n (fluīdum)	extract
9.	Mixtura, ae f	mixture
10.	Linimentum, i n	liniment
11.	Gutta, ae f	drop
12.	Sirūpus, i m	syrup

13.	Olĕum, i n	oil
Semisolids		
14.	Unguentum, i n	ointment
15.	Pasta, ae f	paste
16.	<ul style="list-style-type: none"> Suppositorĭum, i n Suppositorĭum rectāle (vagĭnāle) 	<ul style="list-style-type: none"> suppository rectal (vaginal) suppository
17.	Emplastrum, i n	plaster
Solids		
18.	Tabuleta, ae f	tablet

19.	Dragée	dragée
20.	Pulvis, ĕris m	powder
21.	Granŭlum, i n	granule
22.	Pilŭla, ae f	pill
23.	Specĭes, ĕrum (plural) f	species

Other drug forms

24.	Capsŭla, ae f	capsule
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Capsule is a drug in powdered or pellet form that has been enclosed in a soluble gelatin-like capsule.

25.	Aërosōlum, i n	aerosol
-----	----------------	---------

26.	Membranŭla (ae f)	ophthalmic film
	ophthalmīca (us, a, um)	
	(Lamella ophthalmīca)	

Ophthalmic films are absorbable gelatin films containing drug substances

III. LATIN AND GREEK COMPONENT ELEMENTS OF DRUG NAMES

Many pharmaceutical terms include in their names Greek and Latin component elements of frequent occurrence similar to the clinical terminology. With knowledge of these elements you will be able to write complicated drug names with a correct spelling and to understand their meaning.

GREEK AND LATIN ELEMENTS CARRYING INFORMATION ABOUT PHARMACEUTICAL CHARACTERISTICS OF A DRUG

##	Latin	Meaning	Examples
1.	-aesthes-, -cain-	local anesthetic	Anaesthesinum Novocainum
2.	-alg-, -dol-	analgetic	Pentalginum Panadolum
3.	-andr-, -ster-, -test-	male sex hormone	Testosteronum Androfortum
4.	-as-	enzymes	Lydasum
5.	-asthm-	against asthma	Antiasthmocrinum

6.	-barb-	soforific, hypnotic	Barbitalum
7.	-cid-	antimicrobial	Streptocidum
8.	-cillin-	antibiotics-penicillins	Bicillinum
9.	-cort-	adrenal cortex hormone	Corticotrophinum
10.	-cycl-	antibiotics-tetracyclines	Vitacyclinum
11.	-menth-	containing mint	Boromentholum
12.	-morph-	narcotics	Apomorphinum
13.	-myc-	against fungi, antimycotic	Amycazolum
14.	-oestr-	Female sex hormone	Oestronum
15.	-phyll-	(from Greek phyllon - leaf)	Theophyllum
16.	-pres(s)-, -tens-	hypotensives	Apressinum Angiotensinamidum
17.	-pyr-	antipyretic drugs	Pyramidonum
18.	-sed-	sedatives	Valosedanum
19.	-sept-	antiseptics	Pharyngosept
20.	-sulfa-	sulfamides	Sulfadiazinum

21.	-the-	from tea-leaf	Thealbinum
22.	-vit-	vitamins	Hexavitum

IV. WORD-FORMATIVE AND GRAMMAR STRUCTURE OF PHARMACEUTICAL TERMS

The drug names can be prescribed by international nonpatent names and trade names.

International nonpatent names in prescriptions after "Recipe:" are in Genitive singular without inverted commas:

Tetracyclīni

Vaselīni

Trade drug names are prescribed as follows: the drug name is placed after the pharmaceutical form in Nominative and is in inverted commas:

Suppositoria «Anaesthesolum» - suppositories of anaesthesol

One-word terms

1. All Latin drug names are neuter nouns of the 2nd declension ending by -um. They are written with the first capital letter as the names of chemical elements, medicinal plants:

Tetracyclīnum, in

- A few exceptions to this rule are drug names by -a: No-spa, Do-pa (1st declension).

Multiword terms

1) If the drug preparation name includes a pharmaceutical form it is on the first place: solutio, unguentum, tinctura etc.

2) The drug name is placed after the pharmaceutical form and begins with the capital letter:

solutio Streptocidi	- solution of streptocid
unguentum Tetracyclini	- ointment of tetracycline
tinctura Menthae	- tincture of mint

3) Adjectives

- are written at the end of the prescription line:

Solutio Synoestrōli oleosa	- oil solution of synoestrol
----------------------------	------------------------------

- or are placed after a noun:

Mentha piperīta

- peppermint

Tabulettae Acīdi glutaminīci obductae
tablets

- coated glutaminic acid

V. VOCABULARY

Learn components of medicinal plants

1. cortex, ĭcis m	cortex
2. flos, floris m	flower
3. folĭum, i n	leaf
4. herba, ae f	herb
5. radix, ĭcis f	root
6. rhizōma, ātis n	rhizome

Learn names of medicinal plants

7. Calendŭla, ae f	calendula
8. Chamomilla, ae f	matricary
9. Crataegus, i f	hawthorn
10. Digitālis, is f	foxglove
11. Farfāra, ae f	coltsfoot
12. Frangŭla, ae f	buckthorn
13. Leonŭrus, i m	motherwort
14. Mentha, ae f	mint
15. Quercus, us f	oak
16. Valeriāna, ae f	valerian

VI. EXCERCISES

Exercise 1. Read drug names, find component elements carrying information about pharmaceutical characteristics, give their meaning:

Bicillinum,

Apressinum,

Nicovitum,

Pyramidonum,

Polyoestradiolum,	Hydrolysinum,	Boromentholum,	Diprophyllum,
Laevomycetinum,	Decamevitum,	Cerebrolysinum,	Brulamycinum,
Olivomycinum,	Bruneomycinum,	Theophyllum,	Cocarboxylasum,

Antiasthmocrinum, Synoestrolum, Pentavitum, Urosulfanum, Gentamycinum, Novocainamidum, Octoestronum.

Exercise 2. Translate from Latin into English:

Folium Farfarae, tabulettae olei Menthae, solutio Strophanthini, tabulettae

Prednisoloni, granula Orasi, tabulettae Octoestrol, tabulettae Pantocrini, suspensio «Cindolum», unguentum «Psoriasinum», species antiasthmatica, emplastrum Epilini, tabulettae «Baralginum», suppositoria vaginalia «Osarbonum», tabulettae Mycoheptini, unguentum Tetracyclini ophthalmicum, linimentum «Sanitas», tabulettae «Praegoestrolum», flores Calendulae, solutio Glucosi, tabulettae «Panhexavitum», dragée «Aëvitum», cortex Frangulae, tabulettae Barbamyli, extractum Leonuri fluidum, suppositoria «Anaesthesolum», tabulettae «Bellaesthesinum», infusum Digitalis.

Exercise 3. Translate from English into Latin:

Ointment of tetracycline, solution of novocain, tablets of octoestrol, solution of glucose, ointment of heparin, tablets of myelosan, tincture of valerian, tincture of motherwort, herb of valerian, extract of motherwort, tablets of theophyllin, flowers of matricary, tablets of baralgin, liniment of streptocid, ophthalmic ointment of dibiomycin, antiasthmatic species, tincture of valerian root, extract of buckthorn, tincture of oak root.

Test

I. Give the right answer:

Drug „Angiotropinum“ belongs to drugs which affect:

- a) affecting vessels,
- b) antipyretic drug,
- c) cholagogic,
- d) local anesthetic

Cardiovalenum

- a) antibiotics - tetracyclines,
- b) soporific, hypnotic,

- c) cardiac,
- d) antiinflammatory

Fungicidin

- a) sedative,
- b) containing mint,
- c) hypnotic,
- d) antimycotic

Vasocor

- a) antimycotic,
- b) hypnotic,
- c) antimicrobic,
- d) vasodilating

Thyreoidinum

- a) drugs influencing functions of the thyroid gland,
- b) from tea-leaf,
- b) vitamins,
- r) antipyretic

II. Match the following:

- | | |
|--------------|----------------------------------|
| Anapryrinum | 1) drugs influencing hemopoiesis |
| Apressinum | 2) helmenthic |
| Ipravacainum | 3) diuretic |
| Troxevasinum | 4) antipyretic |
| Sedalginum | 5) hypotensive |
| Antiallersin | 6) analgetic |
| Cholossasum | 7) antispasmodic |
| Urotrastum | 8) sedative |
| Helminthin | 9) antiallergic |

Haematogenum10) cholagogic

III. Give the right answer:

Antibiotic -penicillin

Epicillinum

Biseptolum

Laevomycesinum

Univerm

vitamin

Streptocidum

Undevitum

Nitrofunginum

Cholecinum

cholagogic

Seduxen

Phenobarbitalum

Cholagonum

Bilocid

hypotensive

Tetracyclinum

Pentalginum

Menovasinum

Depressinum

antibiotic

Novalginum

Lidocainum

Erythromycinum

Anaesthesinum

IV. Match the following:

Component elements pharmaceutical characteristics

1.

–press a) for treating skin diseases

–dol- б) antiallergic

–barb- в) antihypertensive

–allerg- г) analgetic

–derm- д) hypnotic

2.

1) nas- а) for treatment eye diseases

2) –sed- б) laxative

3) –cut(i) в) for treatment nose diseases

4) –lax- г) sedatives

5) opht(h)alm- д) for treatment skin diseases

3.

1)–card(i)- а) referring to vessels

2)–ang(i)- б)vascular

3)–hypn- в)for treatment ear diseases

4)gyn- г) hypnotic

5)ot- д) for treatment gynecological diseases

V.Match the following:

1.unguentum, i n	1) herbs
2.suppositorium, i n	2)
3.tinctura, ae f	3) plaster
4.decoctum, i n	4) decoction
5.pulvis, eris n	5) ointment
6.gutta, ae f	6)suppository
7.infusum, i n	7) tincture
8.emplastrum, i n	8) infusion
9.folium, i n	9) powder
10.herba, ae f	10) drop

VI. Give the right answer:

1)rhrisome

rhizoma, atis n

cortex, icis m

solutio, onis f

emulsum, i n

pilula, ae f

2)leaf

gutta, ae f

folium, i n

flos, floris m

pulvis, eris m

tabuletta, ae f

3)bud

a) decoctum, i n

bsirupus, i m

c) fructus, us m

d) gemma, ae f

e) species, ei f

4) root

extractum, i n

tinctura, ae f

herba, ae f

solutio, onis f

radix, icis f

5) seed

tinctura, ae f

semen, inis n

infusum, i n

folium, i n

emplastrum, i n

Topic 2

**Verb (Verbum).Grammatical categories.Imperative mood
(Imperativus).Conjunctive mood (Conjunctivus)**

STANDARD PRESCRIPTION PHRASES INDICATING ORDERS AND INSTRUCTIONS

In this lesson, you will:

- Learn basic standard phrases used in prescriptions
- Learn clinic Latin and Greek component elements used in drug names
- Learn Latin and Greek component elements carrying information on chemical composition of a drug

This lesson is divided into the following sections:

I. Standard prescription phrases indicating orders and instructions II. Clinic Latin and Greek component elements used in drug names III. Latin and Greek component elements carrying information on chemical composition of a drug .

PHRASES INDICATING ORDERS AND INSTRUCTIONS

In the Latin, part of a prescription some verb forms are used which indicate orders and instructions. They are required in order to give to pharmacist instructions how to make up and dispense drugs. You should learn these verb forms as standard prescription phrases. The meaning “order, instruction, direction” is expressed in the Latin part of a prescription by

“Imperative moode” and “conjunctive moode” of a Latin verb.

a) Imperative mode

From all imperative mode forms only the 2nd person singular form is used in prescriptions. You will have to memorize standard prescription phrases in the imperative mode as follows:

--

• Recipe	Take, receive
• Da	Give
• Signa	Write on a label
• Misce	Mix
• Sterilisa! (with the exclamation mark)	Sterilize!
• Adde	Add
• Da tales doses	Give of such doses

b) Conjunctive mode

The Latin conjunctive mode has many meanings. Only one meaning, “order, instruction, direction” is used in prescriptions. These forms are translated from Latin into English with the word-combination “let it be”. You will have to memorize standard prescription phrases in the conjunctive mode as follows:

• Detur	Let it be given
• Signetur	Let it be labeled
• Misceatur	Let it be mixed
• Sterilisetur! (with the exclamation mark)	Let it be sterilized!
• Repetatur	Let it be repeated
• Dentur tales doses	Let it be given of such doses

•Attention!!! - Prescription phrases in imperative and conjunctive modes have the same meaning: order, instruction, direction, therefore they are completely equal and interchangeable. You may use each of them.

b) Verb fieri in prescriptions

The prescription phrase with the verb fieri is often used in prescriptions. Model:

Misce, (ut) fiat + pharmaceutical form in Nominative singular

Note: Conjunction ut is usually omitted

Examples:

•Misce, fiat pulvis.

•Misce, fiat unguentum.

•Misce, fiat linimentum.

BUT!

• Misce, fiant species. (Species - plural)

Mix to make a powder

Mix to make an ointment

Mix to make a liniment

Mix to make species

II. CLINIC LATIN AND GREEK COMPONENT ELEMENTS USED IN DRUG NAMES

In drug names some clinical Latin and Greek component elements are used which you already know.

You will have to pay attention to their spelling and meaning in the pharmaceutical terminology:

##	Latin	Meaning	Examples
1.	-angi-, -vas-,	spasmolytics, referring to vessels	Angiotensinamidum Vasographinum
2.	-cardi-, -cor-, -cord-	cardiovascular drugs	Cardiovalenum Corazolum
3.	-chol-	cholagogic, bile-expelling	Chologonum
4.	-cyt-	(from Greek «cell») antianemic drugs	Cytamenum
5.	-derm-	for treatment of skin	Dermosolonum

		diseases	
6.	-erythr-	(from Greek «red»)	Erythromycinum
7.	glyc-	(from Greek «sweet»)	Glycerophosphatum
8.	-haem-, -aem-	drugs influencing hemopoiesis	Haematogenum Liquaeminum
9.	-hepat-, -hepar-	extracts from liver	Vitohepatum
10.	-lys(in)-	drugs for destruction and excretion	Sarcolysinum
11.	-my(o)-	(from Greek «muscle»)	Myostatinum

12.	-myel(o)-	referring to brain	Myelosanum
13.	-neo-, -nov-	(from Greek «new»)	Neocidum Novandrolum
14.	-pan-	(from Greek «total»)	Pantocidum
15.	-physi(o)-	referring to physical properties	Physiolactinum
16.	-poly-	(from «many»)	Polyvaccinum
17.	-pyo-	antipurulent drugs	Pyocidum
18.	-thyr-	drugs influencing functions of the thyroid gland	Methothyrium

III.GREEK AND LATIN ELEMENTS CARRYING INFORMATION ON CHEMICAL COMPOSITION OF A DRUG

##	Latin	Meaing	Examples
1.	-aeth-	containing ethyl	Aethinalum
2.	-(a)zin-, -zol-, -(a)zid-	containing nitrogen	Aminazinum, Corazolum Saluzidum
3.	-benz-	containing benzol	Benzonalum
4.	-chlor-	containing chlorine	Chloraminum
5.	-cyan-	(from Greek «cyanus» - blue)	Cyanidum
6.	-hydr-	water, hydrogen	Hydrocortisonum
7.	-meth-	containing methyl	Methacinum
8.	-oxy-	containing oxygen	Oxylidinum
9.	-phen-	containing phenyl	Phenolum
10.	-phosph-	containing phosphorus	Phosphacolum
11.	-phthor-	containing fluorine	Phthoracizinum
12.	-thi-	containing sulfur	Thiophosphamidum
13.	-yl-	containing hydrocarbon	Methyluracilum

		radical	
--	--	---------	--

IV. VOCABULARY

Learn drug names:

- | | | |
|-----|-------------------------------|--------------------|
| 1. | Amŷlum, i n Tritīci (um, i n) | wheat starch |
| 2. | Chloxylum, i n | chloxyl |
| 3. | Dibazōlum, i n | dibazol |
| 4. | Eucatōlum, i n | eucatul |
| 5. | Hydrochlorothiazīdum, i n | hydrochlorothiazid |
| 6. | Ichthyōlum, i n | ichthyol |
| 7. | Mycosolōnum, i n | mycosolon |
| 8. | Olēum (i, n) Ricīni (us, i m) | castor oil |
| 9. | Phthoruracīlum, i n | phthoruracil |
| 10. | Polyphepānum, i n | polyphepan |

11. Solutio Ammonii (um, i n) liquid ammonia (solution of

caustici (us, a, um) ammonia)

- | | | |
|-----|---------------------|--------------|
| 12. | Sulfadimezīnum, i n | sulfadimezin |
| 13. | Synthomycīnum, i n | synthomycin |
| 14. | Vaselīnum, i n | vaseline |
| 15. | Xeroformium, i n | xeroform |

Medical plants:

- | | | |
|-----|-------------------|---------------------------|
| 16. | Convallariā, ae f | lily of the valley |
| 17. | Eucalyptus, i f | eucalyptus |
| 18. | Linum, i n | flax |
| 19. | Plantāgo, īnis f | common (greated) plantain |
| 20. | Salviā, ae f | sage |

Other words:

- | | | |
|-----|-------------------------|---------------------|
| 21. | antiasthmaticus, a, um. | antiasthmatic |
| 22. | diureticus, a, um | diuretic, urinative |

23.	piperītus, a, um	pepper
24.	semen, ĩnis n	seed
25.	siccus, a, um	dry

V. EXCERCISES

Exercise 1. Read drug names, find component elements carrying information about pharmaceutical characteristics, give their meaning:

Benzonalum, Dipheninum, Normotensum, Pyrimethaninum, Acetylcysteinum, Sulfalenum, Penicillaminum, Erythromycinum, Sulfathiazolum, Sulfamethoxazolum, Vancomycinum, Diphenhydraminum, Cyclosporinum, Methyluracilum, Hydrolysinum, Nitroglycerinum, Benzobarbitalum, Methindionum, Mycoseptinum, Chlorochininum, Cyclophosphamidum, Cyanocobalaminum, Cerebrolysinum.

Exercise 2. Translate from English into Latin:

Solution of papaverin, tincture of mint, granules of amidopyrin, ointment of xeroform, tablets of sulfadimezin, oil of eucalyptus, motherwort herb tincture, foxglove leaves powder, tablets of dibazol, fluid extract of hawthorn, ointment of ichthyol, solution of procainamid, tablets of phenobarbital, sage leaves tincture, decoction of oak cortex, mint leaves tincture, emulsion of castor oil, tablet of novocainamid, liquid ammonia, oil of peppermint, eucalyptus leaves tincture, tincture of calendula, leaf of common plantain, solution of salvin, matricary leaves, granule of plantaglucid, drops of eucatul, solution of aminophyllin, coltsfoot leaf granules.

Exercise 3. Translate from English into Latin, using the given vocabulary:

1. Give 10 ml of epinephrin solution.
2. Take 200 ml of valerian root tincture.
3. Add 5 ml of castor oil.
4. Give 10 ml of menthol oil.
5. Take 30,0 of xeroform ointment.
6. Mix 5 ml of mint tincture and 10 ml of motherwort tincture.
7. Add 3 ml of peppermint oil.
8. Sterilize 20 ml of castor oil.
9. Take 5,0 of boromenthol ointment.
10. Give 25,0 of synthomycin liniment.
11. Mix 10 ml of lily of the valley tincture and 15 ml of valerian tincture.
12. Give 25 ml of motherwort extract.

13. Take 20,0 of castor oil emulsion.

14. Sterilize 200 ml of Novocain solution.

Test

1. Match the following:

addo, ẽre III	1) to sterilise
curo, are I	2) to give,
do, dare I	3) to be healthy
finio, ire IY4)	4) to repite
misceo, ẽre II	5) to finish
repẽto, ẽre III6)	6) be healthy
salveo, ẽre II	7) to sign
signo, are I	8) to add
valeo, ẽre II	9) to cure
steriliso, are I	10) to mix

2. Match the following:

Calendula, ae f	a)peppermint
Convallaria, ae f	b) calendula
Mentha piperita	c) lily of the valley
Salvia, ae f	d)valearianавалериана
Valeriana, ae f	д) sage

3.Match the following:

misceat	a) Let them be mixed
misceant	б) Let him mix
misceatur	в) Let them mix
misceantur	г) Let it be mixed

4. Match the following:

1. repētata) Let them be repeated

2. repētantб) Let him repeat

3. repetāturb) Let them repeat

4. repetanturr) Let it be repeated

Write the name of drug forms in Nom.sing:

1) misce, fiat ... (powder)

2) misce, fiat ... (ointment)

3) misce, fiat ... (liniment)

4) misce, fiat ... (suppository)

5) misce, fiant ... (species)

Match the following:

Give! 1) Da.

Let it be signed! 2) Signet.

Let it be given such doses! 3) Repēte.

Give such doses! 4) Repetātur.

Mix to make species! 5) Misce, fiat pulvis.

Mix to make powder! 6) Misce, fiant species.

Repitē! 7) Da tales doses.

Pepitē! 8) Dentur tales doses.

Let him sign!

9) Detur.

Give!

10) Signetur

ЭТАЛОНЫ ОТВЕТОВ.

1. 1-8); 2-9); 3-2); 4-5); 5-10); 6-4); 7-6); 8-7); 9-3); 10-1)

2. 1-b; 2-b; 3-a; 4-d; 5-g

3. 1-b; 2-c; 3-d; 4-a

4. 1-b; 2-c; 3-г; 4-a

5. 1-б; 2-в; 3-г; 4-a

6. 1) pulvis, 2) unguentum, 3) linimentum, 4) suppositorium, 5) species

7. 1-e; 2-a; 3-a; 4-i; 5-e

8. 1-9); 2-10); 3-8); 4-7); 5-6); 6-5); 7-3); 8-4); 9-2); 10-1)

Topic 3

**Medical Prescription. Structure of a prescription .General rules of
Latin part of a prescription**

MEDICAL PRESCRIPTION

LIQUIDS AND SEMISOLIDS IN PRESCRIPTIONS

The aim of the lesson:

- To learn the rules of the structure of recipe.
- to form new theoretical knowledge;
- to form practical skills;
- to form practical skills in working with scientific and scientific popular literature.

Concrete tasks:

A student should know:

- The structure of medical prescription and its components;
- The requirements to the Latin part of the prescription;
- Learn to prescribe liquid and semisolid pharmaceutical forms

The content

MEDICAL PRESCRIPTION

LIQUIDS AND SEMISOLIDS IN PRESCRIPTIONS

I. GENERAL INFORMATION ON A MEDICAL PRESCRIPTION

The word "prescription" can be decomposed into "pre" and "script" and literally, means "to write before" a drug can be prepared. The concept of prescriptions date back to the beginning of history. So long as there were medications and a writing system to capture directions for preparation and usage, there were prescriptions. Latin served a good purpose on prescriptions when they were first written in the 1400s. Spread widely by Roman soldiers and traders, Latin was the main language of Western Europe for hundreds of years. It was unlikely to change, because it was a "dead" language, and it was unlikely to be misinterpreted, because it was exact in its meaning. Of course, the patients who didn't know Latin probably didn't have the vaguest idea what they were taking.

Who can issue prescriptions are governed by local legislation. In the United States, all states, physicians, veterinarians, dentists, and pediatricists have full prescription power. Many countries allow mid-level practitioners different prescription privileges. Nurse practitioners, physician assistants, optometrists, homeopathic physicians, registered pharmacists, naturopathic physicians, and doctors of oriental medicine

currently represent the spectrum of mid-level practitioners. Each country regulates what (if any) prescription powers members of the above group are allowed.

Prescriptions are typically written on preprinted prescription forms that are assembled into pads. Preprinted on the form is text that identifies the document as a prescription, the name and address of the hospital or the prescribing doctor.

Predating modern legal definitions of a prescription, a prescription traditionally is composed of four parts: a "superscription", "inscription", "subscription" and "signature".

1. The "superscription" section contains the date of the prescription and patient information (name, address, age, etc).
2. The word "Recipe:" (in English prescriptions "Rx") addressed to the pharmacist separates the superscription from the "inscriptions" section. This is literally an abbreviation for an exhortation to the patient to "take to" what is described in the inscription section. The inscription section defines what is the medication.
3. The "subscription" section contains dispensing directions to the pharmacist. This may be compounding instructions or quantities.
4. The "signature" section contains directions to the patient.

Latin in Prescriptions in Some English-speaking Countries: The only part of a prescription where Latin appears today, however, is in the directions for taking the drug. This use has become a kind of medical shorthand. Some of these

Abbreviated terms have the potential to cause medication errors because they look so similar in handwriting, so their use is on the decline.

E.g.:

• ante cibum	ac	before meals
• pro re nata	prn	as needed
• quaque 3 hora	q 3 h	every 3 hours
• ter in die	tid	3 times a day

II. REQUIREMENTS TO THE LATIN PART OF A PRESCRIPTION

The Latin part of a prescription begins with the word "Recipe" and ends with "Signa". You will have to learn the general requirements to the Latin part of prescriptions as follows (abbreviations in prescriptions are impermissible):

1. The Latin part of a prescription begins with "Recipe", this is a form of address of a physician to a pharmacist:

Recipe: Take:

- Every prescription line, as well as all drug names begin with the capital letter

•Every drug name is written in a separate prescription line. In doing so a blank space is left after “Recipe” (the pharmacist indicates a price of a drug here). If there is not enough space for a drug name in one line it is carried over to the next line with the left indent:

Recipe: Phenylī salicylātis 3,0 Spirītus aethylicī quantum satis

ad solutiōnem

Vaselīni ad 30,0 Misce, fiat unguentum

2.The drug names after “Recipe” are in Genitive

3.After the drug name its quantity is indicated. The doses of drugs are indicated in the decimal numeration system:

•Gram amounts - the abbreviation «gr» is not indicated, the quantity is indicated with decimal points – 10.0 (10 gr.); 0.25 (0,25 gr) etc.

•Milliliter amounts - 10 ml, 0.2 ml;

•Units of activity - ED: 100000 ED (100000 units of activity).

E.g: Recipe: Kalīi chlorīdi 3,0

Insulīni 25 ED

Solutiōnis Glucōsi 10% - 1000 ml

Misceātur. Sterilisētur!

Detur. Signētur: For intravenous infusions.

•Drops amounts (are used seldom) – the number of drops is indicated with Roman figures – singularguttam (one drop -guttam I), pluralguttas (five drops -guttas V);

•Sometimes a physician does not indicate the dosage but affords to a pharmacist an opportunity to determine the quantity of a drug on his own; in that case quantum satis is written in the prescription.

If several drugs are prescribed in the same amount, so the dose is indicated only after the latter one and the abbreviation ana (of each) is written:

E.g: Recipe: Cupri citrātis

Lanolīni

Vaselīni ana 5,0

Take: Coper citrate

Lanoline

Vaseline

of each 5,0

Writing good prescriptions

- Careful use of decimal points to avoid ambiguity:

Avoid unnecessary decimal points: 5 mL instead of 5.0 mL to avoid possible misinterpretation of 5.0=50

Always zero prefix decimals: e.g. 0.5 instead of .5 to avoid misinterpretation with .5=5

Never have trailing zeros on decimals: e.g. use 0.5 instead of .50 to avoid misinterpretation with .50=50

Avoid decimals altogether by changing the units: 0.5 g = 500 mg

III. LIQUID PHARMACEUTICAL FORMS IN PRESCRIPTIONS

Solutions – Solutiōnes

- The Genitive form after “Recipe” – Solutiōnis.

• Solutions can be alcoholic, oil and glyceric, respectively the Latin Genitive forms after “Recipe” are Solutiōnis spirituōsae, Solutiōnis oleōsae, Solutiōnis glycerinōsae (solutio – feminine!), the adjective to be placed at the end of the prescription line before the dosage.

- The solution concentration is indicated in the following way: Recipe:

Solutiōnis Camphōrae oleōsae 10% - 100 ml.

Mucilages – Mucilagīnes

- The Genitive form after “Recipe” – Mucilagīnis.

- The most frequently used mucilage is the starch mucilage: Recipe:

Mucilagīnis Amyli

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Suspensions – Suspensiōnes

- The Genitive form after “Recipe” – Suspensiōnis.

- E.g.: Recipe: Suspensiōnis Hydrocortisoni

Emulsions – Emulsa

- The Genitive form after “Recipe” – Emulsi.

- E.g.: Recipe: Emulsi olēi Ricini.

Infusions and decoctions – Infūsa et Decocta

- The Genitive form after “Recipe” – Infūsi, Decocti.

- After the pharmaceutical form, parts of medicinal plants are indicated:

Cortex - cortex (Genitive – corticis)

Root - radix (Genitive – radicis)

Rhizome – rhizōma (Genitive – rhizomātis)

Leaf – folium (Genitive singular – folii, Genitive plural - foliorum)

Herb – herba (Genitive – herbae)

Flower– flos (Genitive singular – flores, Genitive plural - florum)

- E.g.: Recipe: Decocti corticis Quercus

Tinctures – Tincturae

- The Genitive form after “Recipe” – Tincturae.

- E.g: Recipe: Tincturae Valerianae.

Extracts – Extracta

- The Genitive form after “Recipe” –Extracti.

- Three general types of extracts are distinguished: fluid extracts (Extractum fluidum – extracti fluidi), thick extracts (Extractum spissum – extracti spissi) and dry extracts (Extractum siccum – extracti sicci).

- E.g.: Recipe: Extracti Frangulae fluidi

Liniments – Linimenta

- The Genitive form after “Recipe” – Linimenti.

- E.g.: Recipe: Linimenti Synthomycini.

IV. SEMISOLID PHARMACEUTICAL FORMS IN PRESCRIPTIONS

Ointments – Unguenta

- The Genitive form after “Recipe” – Unguenti.

- Eye ointment – Unguentum ophthalmicum (Unguenti ophthalmici).

- E.g: Recipe: Unguenti Zinci.

Pastes – Pastae

- The Genitive form after “Recipe” – Pastae.

- E.g: Recipe: Pastae Zinci.

Plasters – Emplastra

- The Genitive form after “Recipe” – Emplastri.

• Simple plaster – Emplastrum simplex (Emplastri simplicis).

• E.g.: Recipe: Emplastri Plumbi simplicis.

V. THE MOST-USED PRESCRIPTION PHRASES I

• ad 10,0	up to 10 gr.
• ad usum externum	for external use
• ad usum internum	for internal use
• ana	of each
• bis (tres) repetātur	Let it be repeated twice (three times)
• cito!	urgent!
• contra tussim	against cough
• in ampullis	in ampoules
• in capsulis	in capsules
• in vitro nigro	in a dark phial
• non repetātur	do not repeat
• numēro	number

• pro auctōre	for himself – if a doctor prescribes a drug for himself
• pro infantibus	for children
• pro injectionibus	for injections
• pro me	for me
• pro narcōsi	for narcosis
• pro suspensionibus	for suspensions
• quantum satis	in sufficient amount
• statim!	immediately!

VOCABULARY

Learn names of drugs:

- | | |
|------------------------------|--------------------|
| 1. Aether, ěris m | ether |
| 2. Aethinyloestradiolum, i n | aethinyloestradiol |
| 3. Amidopyrīnum, i n | amidopyrin |
| 4. Aminophyllīnum, i n | aminophyllin |
| 5. Ampicillīnum, i n | ampicillin |
| 6. Anaesthesīnum, i n | anaesthesin |
| 7. Cerebrolysīnum, i n | cerebrolysin |

8. Corvalōlum, i n	corvalol
9. Cortisōnum, i n	cortison
10. Dimedrōlum, i n	dimedrol
11. Furazolidōnum, i n	furazolidon
12. Furacilīnum, i n	furacilin
13. Glucōsum, i n	glucose
14. Hepavītum, i n	hepavit
15. Nitroglycerīnum, i n	nitroglycerin
16. Novocaīnum, i n	novocain
17. Oxaphenamīdum, i n	oxaphenamid
18. Phenacetīnum, i n	phenacetin
19. Pyrazidōlum, i n	pyrazidol
20. Sacchārum, i n	saccharum/sugar
21. Strophanthīnum, i n	strophanthin
22. Sulfazīnum, i n	sulfazin
23. Validōlum, i n	validol

Learn names of medicinal plants:

24. Belladonna, ae f	belladonna
25. Rheum, i n	rhubarb

26. Urtīca, ae f	nettle
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Other words:

27. aethylīcus, a, um	ethyl
28. aqua, ae f	water
29. destillātus, a, um	distilled
30. glycerinōsus, a, um	glyceric
31. oleōsus, a, um	oily, oil
32. pectorālis, e	pectoral

33. rectificātus, a, um	rectificat
34. spirituōsus, a, um	spirituous, alcoholic
35. spirītus, us m	alcohol

VI. EXERCISES

Exercise 1. Read drug names, find component elements carrying information about pharmaceutical characteristics, give their meaning:

Phenolum, Ampicillinum, Hepavitum, Phenacetinum, Cortisonum, Mycosolonum, Pyrazolidonum, Dibazolum, Sulfazinum, Furazolidonum, Chloxylym, Oxaphenamidum, Corvalolum, Aethinyloestradiolum, Benzonalum, Pantocidum, Polyphedanum, Euphyllinum, Phenobarbitalum, Methacinum, Pyocidum, Barbamylum, Chlorophthalmum, Sulfadimezinum, Oxacillinum, Aminophyllinum, Aether, Nitroglycerinum, Sarcocollinum, Novocainum, Corazolum, Anaesthesinum, Chloraminum.

Exercise 2. Translate from English into Latin:

Decoction of buckthorn cortex for injections, apomorphin in ampoules, leaf of common plantain, solution of furacilin for external use, castor oil in capsules, emulsion of castor oil, aevit in capsules, tablets of amidopyrin and phenacetin of each 0,25, powder of ampicillin for suspensions, liniment of synthomycin,

solution of strophanthin in ampoules, tincture of matricary flowers, oily solution of nitroglycerin, spirituous solution of furacilin, decoction of hawthorn cortex, species pectoral, rhubarb syrup, fluid extract of buckthorn, powder of foxglove leaves, decoction of oak cortex, dry extract of belladonna, species diuretic, aether for narcosis, mint pepper leaves.

Exercise 3. Translate the following prescriptions from English into Latin:

- 1) Take: Tincture of lily of the valley
 Tincture of valerian of each 10 ml
 Solution of nitroglycerin 1% - 1 ml
 Validol 2 ml
 Let it be mixed.
 Let it be given.
 Let it be labeled:
- 2) Take: Liquid hawthorn extract 25 ml
 Let it be given.
 Let it be labeled:
- 3) Take: Solution of glucose 5% - 500 ml

Let it be sterilized!

Give.

Write on a label:

4) Take: Powder of rhubarb root 0,06

Give of such doses number 50

Write on a label:

5) Take: Emulsion of castor oil 30,0 - 200 ml

Give.

Write on a label:

6) Take: Phenobarbital 0,05 Sacchar 0,2

Mix to make a powder

Give of such doses number 10 Write on a label:

7) Take: Cerebrolysin 1 ml

Give of such doses number 10 in ampoules

Write on a label:

8) Take: Anaesthesin 2,5

Talc 15,0

Vaseline up to 50,0

Mix to make a liniment

Give.

Write on a label:

9) Take: Solution of aminophyllin 24% - 1 ml

Give of such doses number 6 in ampoules

Write on a label:

10) Take: Fluid extract of buckthorn 4,0
 Powder of rhubarb root 3,0
 Dry extract of belladonna 0,7
 Mix. Give.
 Write on a label:

Test

I . Match the following:

Belladonna, ae f	1) sugar
Crataegus, i f	2) ether
Helichrysum arenarium, i n3)	sea buckthorn
Hippophaë, ës f	4) immortelle sandy
Hypericum, i n5)	motherwort
Leonurus, i m	6) Sn't Johns wort
Rheum, i n7)	nettle
Urtica, ae f8)	rhubarb
Aether, eris m9)	belladonna
Saccharum, i n 10)	hothorn

II. Match the following:

venenum, i n	1) ethyl
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quantum satis 2) chologogue
oleosus, a, um 3) distilled
obductus, a, um 4) liquid
fluidus, a, um 5) abducted
destillatus, a, um 6) oily
cholagogus, a, um 7) of such doses
aethylicus, a, um 8) poison

III. Fill in the missing letter:

Diproph...llinum

Nitrogl...cerinum

...enacetinum

Men...olum

Sac...arum

Tetrac...clinum

Euph...llinum

Furac...linum

Cord...gitum

D...medrol

IV. Give the right answer:

Holagogus, a,um

obductus, a, um

destillatus, a, um

fluidus, a, um

cholagogus, a, um

oleosus, a, um

Immortelle sandy

Hypericum, i n

Helichrysum arenarium, i n

Leonurus, i m

Rheum, i n

Urtica, ae f

Hothorn

Convallaria, ae f

Salvia, ae f

Belladonna, ae f

Crataegus, i f

Hippophaë, ës f

Topic4

PRESCRIPTION REGULATIONS FOR TABLETS, SUPPOSITORIES AND OPHTHALMIC FILMS SOLIDS AND OTHER PHARMACEUTICAL FORMS IN PRESCRIPTIONS

PRESCRIPTION REGULATIONS FOR TABLETS SUPPOSITORIES AND OPHTHALMIC FILMS SOLIDS AND OTHER PHARMACEUTICAL FORMS IN PRESCRIPTIONS

The aim of the lesson:

- To form new theoretical knowledge in the theme;
- To form practical skills in independent search of information on the given subject;
- To form practical skills in the work with scientific and scientific popular literature.

A student should know:

- Prescription regulations for tablets, suppositories and ophthalmic films;

A student should be able to:

- Become familiar with prescription regulations for tablets, suppositories and ophthalmic films.
- Learn to prescribe solid and other pharmaceutical forms.
- Learn the most used prescription phrases.

This lesson is divided into the following sections:

- I. Prescription regulations for tablets, suppositories and ophthalmic films.
- II. Preposition “cum” in prescriptions.
- III. Solid pharmaceutical forms in prescriptions
- IV. Other pharmaceutical forms in prescriptions
- V. The most-used prescription phrases

The content

I. PRESCRIPTION REGULATIONS FOR TABLETS, SUPPOSITORIES AND OPHTHALMIC FILMS

The prescription regulations for tablets, suppositories and ophthalmic films are different from other pharmaceutical forms. The names of these pharmaceutical forms in prescriptions after “Recipe” are not in Genitive but in Accusative. You will have to remember the endings of these pharmaceutical forms as follows:

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• Tabulettam (obductam)	tablet (coated)
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• Tabulettas (obductas)	tablets (coated)
• Suppositorium (vagināle, rectāle)	suppository (rectal, vaginal)
• Suppositoria (vaginalia, rectalia)	suppositories (rectal, vaginal)
• Lamellas (membranulas) ophthalmicas	ophthalmic films

E.g.:

Recipe: Tabulettam Digoxini 0, 0001

Da tales doses numero 12

Signa:

Recipe: Tabulettas extracti Valerianae 0,02 obductas numero 50

Da. Signa:

Recipe: Suppositoria rectalia Apilaci 0,005 numero 12 Da. Signa:

Recipe: Membranulas ophthalmicas cum Kanamycini sulfate 0, 00003 numero 100

Da. Signa:

II. PREPOSITION “CUM” IN PRESCRIPTIONS

The names of suppositories and ophthalmic films drugs are often used with the preposition “cum” – with. You will have to remember the nouns endings after the preposition “cum” as follows:

• Singular	• Nouns of the 2nd declension – ending-o (cum Ichthyolo, cum Oxytetracyclino)
• Plural	• Nouns of the 3rd declension – ending-ibus (with valerian roots - cum radicibus Valerianae)

The drug names with the nouns of other declensions with the preposition “cum” are not in use.

III. SOLID PHARMACEUTICAL FORMS IN PRESCRIPTIONS

Tablets – Tabulettae

- The prescription regulations for tablets see above.

- There are two prescription forms of tablets:

1. Initially, a drug name with the dose is indicated followed by the phrase “Da tales doses numĕro ... in tabulettis” (Give of such doses number ... in a tablet form).

2. The second prescription form begins with the word “Tabulettam”, followed by the drug name and the dose, and ends with the phrase “Da tales doses numĕro ...” (Give of such doses number ...).

Compare:

1st prescription form:

Recipe: Paracetamōli 0,3

Da tales doses numĕro 6 in tabulettis

Signa: 1 tablet in case of headache

2nd prescription form:

Recipe: Tabulettam Paracetamōli 0,3

Da tales doses numĕro 6

Signa: 1 tablet in case of headache

- Tablets known as trade drug names are prescribed as follows: initially the word “Tabulettas” is indicated, the drug name is placed after the pharmaceutical form in Nominative and is in inverted commas, followed by the word “numĕro”:

Recipe: Tabulettas “Nicoverīnum” numĕro 20

Da. Signa: 1 tablet twice a day

Dragée – Dragée

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- The word “dragée” has no declension endings.

- There is only one prescription form for dragée: the word “Dragée”, then a drug name and the phrase “Da tales doses numĕro...” (Give of such doses number ...).

Recipe: Dragée Diazolīni 0, 05

Da tales doses numĕro 20

Signa: 1 dragee twice a day

Powders – Pulvĕres

- The Genitive form after “Recipe” – Pulvĕris.

- E.g.: Recipe: Pulvĕris radīcis Rhei

- Volatile and hygroscopic powders are given out packed in waxed and paraffined paper as indicated in prescriptions: E.g. - Da tales doses numēro... in charta cerāta (Give of such doses number ... in waxed paper).

Granules – Granŭla

- “Granŭlum” is neutrum.

- The Genitive form after “Recipe” – Granŭli (in plural often – Granulŭrum).

- E.g.: Recipe: Granulŭrum Natrii aminocylātis

a. OTHER PHARMACEUTICAL FORMS IN

PRESCRIPTIONS Capsules – Capsŭlae

- Capsule is a drug in powdered, fluid or pellet form that has been enclosed in a soluble gelatin-likecapsule.

- Soft gelatine capsules and Elastic gelatine capsules are distinguished - Capsŭlae gelatinŏsae molles et durae.

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- In prescriptions the phrase “in capsŭlis gelatinŏsis” (in gelatine capsules) is indicated.

Ophthalmic films – Membranŭlae (Lamellae) ophthalmīcae

- Ophthalmic films are absorbable gelatin films containing drug substances.

- Membranŭla and Lamella are synonyms.

- The prescription regulations for ophthalmic films see above.

- The ophthalmic films are often prescribed with the preposition “cum”.

- E.g.: Recipe: Membranŭlas ophthalmīcas cum Florenālo.

Aerosols – Aërosŏla

- The aerosols are prescribed in the following way: “Recipe” is followed by the word “Aërosŏlum” (Accusative singular) and by the trade drug name in Nominative and in inverted commas, then the quantity after “numēro” is indicated.

- E.g.: Recipe: Aërosŏlum “Ephatīnum” numēro 1.

V. THE MOST-USED PRESCRIPTION PHRASES II

• in charta cerāta	in waxed paper
• in charta paraffināta	in paraffined paper

• in capsulis gelatinosis	in gelatine capsules
• in capsulis gelatinosis elasticis	in elastic gelatine capsules
• in tabulettis (obductis)	in tablets (coated)
• cum radicibus ...	with ... roots
• Misce, fiat suppositorium rectale (vaginale)	Mix to make a rectal (vaginal) suppository
• Misce, fiant suppositoria rectalia (vaginalia)	Mix to make rectal (vaginal) suppositories
• Misce, fiat pulvis subtilissimus	Mix to make the finest powder

VI. VOCABULARY

Learn names of drugs:

1. Analginum, i n analgin
2. Corglyconum, i n corglycon
3. Diprophyllinum, i n diprophyllin
4. Euphyllinum, i n euphyllin
5. Florenalum, i n florenal
6. Methyloestradiolum, i n methyloestradiol
7. Nystatinum, i n nystatin
8. Phenobarbitalum, i n phenobarbital
9. Phenobolinum, i n phenobolin
10. Phenoxyethylpenicillinum, i n phenoxyethylpenicillin

11. Phthivazīdum, i n	phthivazid
12. Pyracetāmum, i n	pyracetam
13. Saluzīdum, i n	saluzid
14. Streptocīdum, i n	streptocid
15. Tetracyclīnum, i n	tetracycline
16. Iodum, i n	iodine

Learn names of medicinal plants:

17. Alōē, es f	aloe
18. Althaea, ae f	althea
19. Cacao	cocoa
20. Millefolīum, i n	milfoil

Other words:

21. composītus, a, um	complex
22. fluīdus, a, um	liquid
23. in tabulettis (obductis)	in (coated) tablets
24. obductus, a, um	coated
25. ophthalmīcus, a, um	ophthalmic

26. simplex, ĩcis	simple
27. solubīlis, e	soluble

VII. EXERCISES

Exercise 1. Read drug names, find component elements carrying information about pharmaceutical characteristics, give their meaning:

Phenoxymethylpenicillinum, Vitoxycyclinum, Hexathidum, Glycerinum, Glycerophosphenum, Isapheninum, Intercaium, Kanacidinum, Erythromycinum, Methacyclinum, Oxacillinum, Metronidazolum, Mechloralum, Neocidum, Novosedum, Oxamycinum, Pentamethonum, Sedalginum, Synthacortum, Sulfurenum, Sulfathiazolum, Theophedrinum, Thiobutalum, Urosulfanum, Urozinum, Phenaconum, Phosphothiaminum, Chlormethinum, Cholosasum, Oestrogynonum, Aethylum, Aethimizolum, Haemoferum, Benzocainum, Abapressinum, Ancortonum, Anaesthocainum, Antistenocardinum, Aseptilexum, Aethylbarbitalum.

Exercise 2. Translate from English into Latin:

Solution of glucose, tablets of analgin, liquid extract of aloe, coated tablets of tetracyclin, tincture of matricary flowers, decoction of oak cortex, liniment of synthomycin, ointment of oxolin, syrup of althaea,

spirituous solution of iodine, granules of furazolidon, dragee of phenoxymethylpenicillin, solution of furacilin for external use, oily solution of phenobolin, tablets of pyrocetam, powder of ampicillin for suspensions, coated tablets of valerian extract, rhizomes with valerian roots, mucilages of flax seeds, tincture of eucalyptus, infusion of pepper mint leaves, leaf of aloe, leaves of sage, simple syrup, complex plaster, solution of corglycon, oily solution of nitroglycerin, soluble saluzid, powder and tablets of phthivazid, tablets for cough.

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Exercise 3. Translate the following prescriptions from English into Latin:

- 1) Take: Powder of foxglove leaves 0,05
Sacchar 0,3
Mix to make a powder
Let it be given of such doses number 12
Let it be labeled:
- 2) Take: Cortex of hawthorn 30,0
Leaves of nettle
Herb of milfoil 10,0
Mix to make species
Let it be given
Let it be labeled:
- 3) Take: Powder of ampicillin for suspensions 60,0
Give in a dark phial
Write on a label:
- 4) Take: Suppositories with diprophyllin 0,5 number 10
Give
Write on a label:
- 5) Take: Tablets of microiodine with phenobarbital number 40
Give in a dark phial

Write on a label:

6) Take Ointment of tetracycline ophthalmic 10,0

Give

Write on a label:

7)Take: Sulfadimezin Streptocid

Synthomycin of each 1,0 Mix to make a powder Give

Write on a label:

8)Take: Tetracycline 100 000 ED

Give of such doses number 24 in a tablet form

Write on a label:

9) Take: Tablets of tetracycline with nystatin coated 100 000 ED

number 25

Give

Write on a label:

10) Take: Euphyllin 0,2

Cocoa oil 2,0

Mix to make a suppository

Give of such doses number 6

Write on a label:

11) Take: Ichthyol 3,0

Vaseline up to 30,0

Mix to make an ointment

Give

Write on a label:

12) Take: Ointment of furacilin 0,2% - 30,0

Give

Write on a label:

13) Take: Ointment of xeroform 10% - 30,0 Give

Write on a label:

14) Take: Methyloestradiol 0,00002

Give of such doses number 20 in a tablet form

Write on a label:

15) Take: Liquid extract of aloe 1 ml

Give of such doses number 10 in ampoules Write on a label:

16) Take: Synthomycin 0,2 Castor oil 20 ml

Mix to make a liniment Give

Write on a label:

17) Take: Tablets of valerian extract coated 0, 02 number 50 Give

Write on a label:

18) Take: Tablet of furacilin 0, 02

Give of such doses number 10

Write on a label:

19) Take: Ophthalmic films with florenal number 30

Give

Write on a label:

20) Take: Tablets of sulfadimezin 0, 5 number 12 Give

Write on a label:

Topic 5

**Latin names of Chemical elements, Acid names Oxides, Peroxides,
Hydroxides**

Latin names of Chemical elements, Acid names Oxides, Peroxides, Hydroxides

The aim of the lesson:

Educational:

- To check the assimilation of the material.
- To form new theoretical knowledge on the subject;
- To form practical skills in independent search of the information on the given topic;
- To form practical skills in the work.

Concrete tasks:

A student should know:

1. Latin names of Chemical elements.
2. The rules of formation of names of acids:
3. The rules of formation of names of Oxides, Peroxides and Hydroxides

A student should be able to :

To translate the names of chemical elements.

To form Latin names of oxides, peroxides, hydroxides.

To write the Latin part of the recipe.

To translate multiword pharmaceutical forms.

2) Developing aim:

- to perfect cognition skills;
- to develop cognitive interest to the questions of pharmaceutical terminology

The Content:

All Latin names of chemical elements are neuter nouns of the 2nd declension:

E.g.: Bromum, i n; Iodum, i n; Bismuthum, i n

There are two exceptions to this rule:

- sulfur - Sulfur, ūris n (3rd declension)
- phosphorus - Phosphōrus, i m (masculine)

Special attention must be given to the spelling of the following chemical elements:

Chemical element	Latin	English
Bi	Bismŭthum, i n	bismuth
Ca	Calcĭum, i n	calcium
F	Fluōrum, i n or Phthorum, i n	fluorine
Fe	Ferrum, i n	iron
H	Hydrogenĭum, i n	hydrogen
Hg	Hydrargŷrum, i n	mercury
K	Kalĭum, i n	potassium
Mg	Magnesĭum, i n or Magnĭum, i n	magnesium
Na	Natrĭum, i n	sodium
O	Oxygenĭum, i n	oxygen
Pb	Plumbum, i n	lead
S	Sulfur, ūris n	sulfur
Zn	Zincum, i n	zinc

II. LATIN NAMES OF ACIDS

The Latin names of acids consist of the noun “acĭdum” (acĭdum, i n - acid) and the concordant adjective of the 1st group:

acĭdum + stem of the chemical element name + -ĭc/-ōs-+-um

a) Latin adjectives with the suffix -ĭc- and the ending -um correspond to English adjectives ending by-ic.

E.g.:

arsenic acid - Acĭdum arsenicĭcum (Arsenĭcum, i n → arsenic + ĭc + um);

•sulphuric acid - Acĭdum sulfurĭcum (Sulfur, ůris n→ sulfur + ĭc + um);

silicic acid - Acĭdum silicĭcum (Silicĭum, i n→ silic + ĭc + um);

b)Latin adjectives with the suffix -ōs and the ending -um correspond to English adjectives ending by-ous.

E.g.:

nitrous acid - Acĭdum nitrōsum (Nitrogenĭum, i n→ nitr + ōs + um);

sulphurous acid - Acĭdum sulfurōsum (Sulfur, ůris n→ sulfur + ōs + um);

arsenious acid - Acĭdum arsenicōsum (Arsenĭcum, i n→ arsenic + ōs + um).

c)Latin acid names with the prefix hydro- ending by-ĭcum correspond to English acid names with the prefixhydro- ending by-ic (Acĭdum hydrochlorĭcum – hydrochloric acid).

Attention!!! - Acid names used as drugs after pharmaceutical forms are written with the first capital letter:

E.g.:

- Tabulettae Acĭdi folĭci - tablets of folic acid
- Dragée Acĭdi ascorbinĭci - dragée of ascorbic acid

III. LATIN NAMES OF OXIDES, PEROXIDES, HYDROXIDES

Latin names of oxides, peroxides and hydroxides consist of two words:

First one: name of a chemical element in Genitive

Second one: word “oxŷdum” (oxide), “peroxŷdum” (peroxide) or “hydroxŷdum” (hydroxide) in Nominative.

E.g.:

- Zinci oxŷdum - zinc oxide
- Ferri oxŷdum - ferric oxide
- Hydrogenĭi peroxŷdum - hydrogen peroxide
- Calcĭi hydroxŷdum - calcium hydroxide

Attention!!! - Names of oxides, peroxides and hydroxides are written after pharmaceutical forms with the first capital letter:

E.g.:

Solutĭo Hydrogenĭi peroxŷdi dilŭta – diluted solution of hydrogen peroxide

IV. VOCABULARY

Learn names of acids:

1. acĭdum acetĭcum	acetic acid
2. acĭdum acetylsalicylicum	acetylsalicylic acid
3. acĭdum ascorbinĭcum	ascorbic acid
4. acĭdum benzoĭcum	benzoic acid
5. acĭdum borĭcum	boric acid
6. acĭdum folĭcum	folic acid
7. acĭdum glutaminĭcum	glutaminic acid
8. acĭdum hydrochlorĭcum	hydrochloric acid
9. acĭdum hydrosulfurĭcum	hydrosulfuric acid
10. acĭdum lactĭcum	lactic acid
11. acĭdum lipoĭcum	lipoic acid
12. acĭdum nicotinĭcum	nicotinic acid
13. acĭdum nitrĭcum	nitric acid
14. acĭdum nitrōsum	nitrous acid
15. acĭdum phosphorĭcum	phosphoric acid
16. acĭdum salicylicum	salicylic acid
17. acĭdum sulfurĭcum	sulfuric acid
18. acĭdum sulfurōsum	sulfurous acid

Learn names of drugs:

19. Camphōra, ae f	camphora
20. Chinosōlum, i n	chinosol
21. Chloroformĭum, i n	chloroform
22. Coffeĭnum, i n	caffeine
23. Hydrocortisōnum, i n	hydrocortison

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24. Menthōlum, i n	menthol
25. Naphthalānum, i n	naphthalan
26. Phthalazōlum, i n	phthalazol
27. Prednisolōnum, i n	prednisolon

28.Synoestrōlum, i n	synoestrol
29.Talcum, i n	talc
30.Tannīnum, i n	tannin
Other words:	
31.albus, a, um	white
32.depurātus, a, um	clear
33.dilūtus, a, um	diluted
34.flavus, a, um	yellow

V. EXERCISES

Exercise 1. Translate from English into Latin:

Oily solution of camphora for external use; chloroform for narcosis; liniment of synthomycin with novocain; solution of prednisolon for injections; glyceric solution of ichthyol; spirituous solution of iodine for internal use; solution of novocain in ampoules, solution of nicotinic acid; mucilages of althea root, diluted hydrochloric acid; boric acid; tablets of lipoic acid; dragée of ascorbinic acid, zinc ointment; clear sulfur, yellow mercury oxide, acetylsalicylic acid in tablets, tablets of amidopyrin and phenacetin of each 0,25; phenoxymethylpenicillin for suspension; oily solution of synoestrol in ampoules, powder for suspensions; suppositories with dimedrol for children; diluted solution of hydrogen peroxide; hydrosulfuric acid; nicotinic acid in tablets; acetic acid; phosphoric acid; magnesium peroxide; zinc oxide; calcium hydroxide, hydrogen peroxide; benzoic acid.

Exercise 2. Translate the following prescriptions from English into Latin:

1)Take: Folic acid 0,0008 Ascorbic acid 0,1

Give of such doses number 30 in tablet form

Write on a label:

2)Take: White mercurial ointment 5% - 25,0

Let it be given

Let it be labeled:

3)Take: Spirituous solution of salicylic acid 1% - 40 ml

Give

Write on a label:

4)Take: Acetylsalicylic acid

Phenacetin of each 0,25

Caffeine 0,05

Give of such doses number 12 in a tablet form

Write on a label:

5)Take: Ointment of hydrocortison 1% - 10,0

Give

Write on a label:

6)Take Dragée of ascorbic acid 0,05 number 50

Give

Write on a label:

7)Take: Tablets of phthalazol 0,05 number 20

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Give

Write on a label:

8) Take: Tincture of plantain leaves 10,0 - 20 ml

Give

Write on a label:

9) Take: Salicylic acid 5,0

Zinc oxide 0,5

Talc 50,0

Mix to make a powder

Let it be given

Let it be labeled:

10) Take: Yellow mercury oxide 0,6
 Ichthyol 0,80
 Ointment of zinc 20,0
 Mix to make an ointment
 Let it be given
 Let it be labeled:

Sample Test

Translate from English into Latin:

Oily solution of camphora for external use

chloroform for narcosis

liniment of synthomycin with novocain

solution of prednisolon for injections

glyceric solution of ichthyol

spirituous solution of iodine for internal use

solution of novocain in ampoules

solution of nicotinic acid

mucilages of althea root

diluted hydrochloric acid

boric acid

tablets of lipoic acid

Translate the following prescriptions from English into Latin:

1) Take: Chloroform

Ethyl alcohol 95% - 20 ml

Ethyl ether 10 ml

Liquid ammonia 5 drops

Mix

Give

Write on a label:

2) Take: Clear sulfur

Magnesium oxide Sacchar of each 10,0

Mix to make a powder

Give

Write on a label:

3) Take: Anaesthesin Xeroform

Talc of each 10,0

Mix to make a powder Give

Write on a label:

4) Take: Coated tablets of glutaminic acid 0,25 number 100

Give

Write on a label:

5) Take: Ichthyol 1,25

Zinc oxide

Wheat starch of each 12,5

Vaseline up to 50,0

Mix to make a paste

Give

Write on a label:

Topic 6

Latin names of Salts in prescriptions

Latin names of Salts in prescriptions

The aim of the lesson:

1) Educational:

- To check the assimilation of the material.
- To form new theoretical knowledge on the subject;
- To form practical skills in independent search of the information on the given topic;
- To form practical skills in the work.

Concrete tasks:

A student should know:

1. Latin names of Salts.
2. Latin names of anions
3. Two-component names of potassium and sodium salts

A student should be able to:

To translate the names of salts.

To form Latin names of salts .

To write the Latin part of the recipe.

To translate multiword pharmaceutical forms.

2) Developing aim:

- to perfect cognition skills;
- to develop cognitive interest to the questions of pharmaceutical terminology

The Content:

LATIN NAMES OF SALTS

The salts names in Latin consist of two nouns:

- the name of cation comes first in Genitive,
- the name of anion occupies the second place and is in Nominative

E.g:

- Aluminii nitras - aluminium nitrate
- Adrenalini hydrochloridum - adrenalin hydrochloride
- Natrii nitris - sodium nitrite

It is important to keep in mind that cation names in Latin are always written with the first capital letter and anion names are always written with the first small letter (e.g: Solutio Natrii tetraboratis glycerinosa).

II. LATIN NAMES OF ANIONS

All Latin suffixes and endings of anion names in Nominative and Genitive are listed in the table:

Latin - Nominative		Latin - Genitive		English
-as	Aluminii nitras	-atis	Aluminii nitratis	aluminium nitrate
-is	Aluminii nitris	-itis	Aluminii nitritis	aluminium nitrite
-idum	Natrii chloridum	-idi	Natrii chloridi	sodium chloride

Explanatory notes to the table:

•Anion names with the suffixes -as, -is are Latin nouns of the 3rd declension. The letter-s- in Latin names accords with the letter-t- in English names:

E.g:

- citras - citrate
- phosphas - phosphate
- nitris - nitrite

•Genitive forms of anion names with suffixes -as-, -is- are formed by analogy with the nouns of the 3rd declension:

Compare:

•citrās, ātis m - tuberosītas, ātis f

•Anion names with the suffixe -id- are Latin nouns of the 2nd declension:

E.g:

•chlorīdum, i n - chloride

•bromīdum, i n - bromide

III. TWO-COMPONENT NAMES OF POTASSIUM AND SODIUM SALTS

Two-component names of potassium and sodium are written with a hyphen and the both parts have the same grammatical case:

E.g: sulphacyl sodium

• Nominative: Sulfacylum-natrium

• Genitive: Sulfacyli-natrii

IV. VOCABULARY

Learn names of drugs:

- | | | |
|------------------------------------|--------------------------|-------------------------|
| 1. Adrenalīnum, i n | | adrenalin |
| 2. Aethylmorphīnum, i n | | aethylmorphine |
| 3. Apomorphīnum, i n | | apomorphine |
| 4. Barbitālūm-natriūm, i n | | barbital-sodium |
| 5. Benzylpenicillīnum-natriūm, i n | | benzylpenicillin-sodium |
| 6. Codeīnum, i n | | codeine |
| 7. Coffeīnum-natriūbenzōas, | | coffeine-sodiumbenzoate |
| | Coffeīni-natriūbenzōātis | |
| 8. Dicaīnum, i n | | dicain |
| 9. Ephedrīnum, i n | | ephedrin |
| 10. Methylēnum (i, n) | coerulēum | blue methylen |
| | (us, a, um) | |
| 11. Methylī salicylas, ātis m | | methyl salicylate |
| 12. Morphīnum, i n | | morphine |
| 13. Norsulfazōlum, i n | | norsulfazol |
| 14. Oleandomycīnum, i n | | oleandomycin |

15.Olĕum Helianthi (us, i m)	sunflower-seedoil
16.Olĕum Persicōrum (um, i n)	peach oil
17.Oxytetracyclīnum, i n	oxytetracycline
18.Phenylī salicylas, ātis m	phenyl salicylate
19.Riboflavīnum, i n	riboflavin
20.Salicylas, ātis m	salicylate
21.Sulfacylum-natriūm,i n	sulfacyl-sodium
22.Testosterōnum, i n	testosteron
23.Thiamīnum, i n	thiamin

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Learn names of medicinal plants:

24.Adōnis (īdis m, f) vernālis spring adonis
(is, e)

Other words:

25.isotonīcus, a, um isotonic

V. EXERCISES

Exercise 1. Translate from English into Latin:

Complex liniment of salicylate, isotonic solution of sodium chloride, tablets of calcium gluconate, coated tablets of tetracyclin hydrochloride, diluted solution of hydrogen peroxide, basic acetate of lead, powder of oxytetracyclin, matricary flowers for internal use, sodium hydrocitrae for injections, basic bismuth nitrate with belladonna extract, phenoxymethylpenicillin for injections, oily solution of synoestrol in ampoules, tincture of plantain leaves, milfoil herb, solution of mercury cyanide, tincture of matricary flowers, solution of sulfacyl-sodium in ampoules, solution of thiamin bromide, aloe syrup with iron, chloroform for narcosis; powder of foxglove leaves, granules of furazolidon, powder and tablets of phthivazid, oily solution of anaesthesin.

Exercise 2. Translate the following prescriptions from English into Latin:

1) Take: Blue methylen 0,5
Solution of glucose 25% - 50 ml
Give of such doses number 3 in ampoules
Write on a label:

2) Take: Tincture of spring adonis herb 180 ml

Amidopyrin 2,0
Sodium bromide 4,0
Codeine phosphate 0,2
Mix. Give.

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Write on a label:

3) Take: Tincture of althea root 180 ml
Sodium hydrocarbonate
Sodium benzoate of each 5,0
Simple syrup 20,0
Mix. Give.

Write on a label:

4) Take: Tablets of tetracycline hydrochloride 0,1 number 30
Give

Write on a label:

5) Take: Suspension of hydrocortisone acetate 2,5% - 2 ml
Give of such doses number 5

Write on a label:

6) Take Dimedrol 0,01
Ephedrin hydrochloride 0,1
Peach oil 10 ml
Mint oil I drop
Mix
Give

Write on a label:

7) Take: Tablets of phthalazol 0,05 number 20

Give

Write on a label:

8) Take: Iodine 0,03

Iodide potassium 1,3

Glycerin 30,0

Peppermint oil III drops

Mix. Give.

Write on a label:

9) Take: Ascorbic acid

Nicotinic acid of each 0,05

Riboflavin

Thiamine bromide of each 0,01 Sacchar 0,3

Mix to make a powder

Give of such doses number 30 Write on a label:

10. Take: Analgin

Amidopyrin

Phenacetin of each 0,2

Coffeine sodium benzoate 0,02

Codeine phosphate 0,015

Give of such doses number 10 in a tablet form Write on a label:

11) Take: Methol 0,1

Phenyl salicylate 0,3

Vaseline oil up to 10 ml

Mix. Give. Write on a label:

12) Take: Extract of belladonna 0,01 Basic bismuth nitrate

Phenyl salicylate of each 0,25 Mix to make a powder

Give of such doses number 10: Write on a label:

13) Take: Chloroform

Sunflower-seedoil

Methyl salicylate of each 15 ml

Mix to make a liniment

Give

Write on a label:

14)Take: Magnesium carbonate 4,0

Potassium carbonate 5,0

Sodium hydrocarbonate 1,0

Glycerin in sufficient amount

Mix to make a paste

Give

Write on a label:

15) Take: Streptocid

Norsulfazol of each 3,0

Benzylpenicillin sodium 50 000 ED

Ephedrin hydrochloride

Acetylsalicylic acid of each 0,15

Mix to make a powder Give

Write on a label:

16) Take: Solution of dicain 0,5% - 5 ml

Solution of adrenalin hydrochloride 0,1% - III drops Mix

Give

Write on a label:

17) Take: Oily solution of testosteron propionate 1% - 1 ml Give of such doses number 6 in ampoules

Write on a label.

18) Take: Menthol

Ethylmorphin hydrochloride of each 0,01

Sacchar 0,03

Mix to make a powder

Give of such doses number 10

Write on a label:

19) Take: Tincture of valerian root 200 ml Sodium bromide 5,0

Sodium barbital 2,0 Ethylmorphin hydrochloride 0,15 Mix. Give.

Write on a label:

Sample Test

Translate from English into Latin:

Complex liniment of salicylate

isotonic solution of sodium chloride

tablets of calcium gluconate

coated tablets of tetracyclin hydrochloride

diluted solution of hydrogen peroxide

basic acetate of lead

powder of oxytetracyclin

Translate the following prescriptions from English into Latin:

1) Take: Methol 0,1

Phenyl salicylate 0,3

Vaseline oil up to 10 ml

Mix. Give. Write on a label:

2) Take: Extract of belladonna 0,01 Basic bismuth nitrate

Phenyl salicylate of each 0,25 Mix to make a powder

Give of such doses number 10: Write on a label:

3) Take: Chloroform

Sunflower-seedoil

Methyl salicylate of each 15 ml

Mix to make a liniment

Give

Write on a label:

4) Take: Magnesium carbonate 4,0

Potassium carbonate 5,0

Sodium hydrocarbonate 1,0

Glycerin in sufficient amount
Mix to make a paste

Give

Write on a label:

5) Take: Oily solution of testosterone propionate 1% - 1 ml Give of such doses number 6 in ampoules
Write on a label.

Topic 7

PRESCRIPTION REGULATIONS FOR TABLETS SUPPOSITORIES AND OPHTHALMIC FILMS SOLIDS AND OTHER PHARMACEUTICAL FORMS IN PRESCRIPTIONS

PRESCRIPTION REGULATIONS FOR TABLETS SUPPOSITORIES AND OPHTHALMIC FILMS SOLIDS AND OTHER PHARMACEUTICAL FORMS IN PRESCRIPTIONS

The aim of the lesson:

- To form new theoretical knowledge;
- To form practical skills in independent skills;
- To form practical skills in the work with scientific and scientific popular literature.

Concrete tasks:

A student should know:

To become familiar with prescription regulations for tablets, suppositories and ophthalmic films.

To learn to prescribe solid and other pharmaceutical forms.

To learn the most used prescription phrases.

I. PRESCRIPTION REGULATIONS FOR TABLETS, SUPPOSITORIES AND OPHTHALMIC FILMS

The prescription regulations for tablets, suppositories and ophthalmic films are different from other pharmaceutical forms. The names of these pharmaceutical forms in prescriptions after “Recipe” are not in Genitive but in Accusative. You will have to remember the endings of these pharmaceutical forms as follows:

- Tabulettam (obductam) tablet (coated)
- Tabulettas (obductas) tablets (coated)
- Suppositorium (vagināle, rectāle) suppository (rectal, vaginal)
- Suppositoria (vaginalia, rectalia) suppositories (rectal, vaginal)
- Lamellas (membranulas) ophthalmicas ophthalmic films

E.g.:

Recipe:Tabulettam Digoxīni 0,0001

Da tales doses numēro 12

Signa :

Recipe:Tabulettas extracti Valeriānae 0,02obductas numēro 50

Da. Signa:

Recipe:Suppositoria rectalia Apilāci 0,005 numēro 12

Da. Signa:

Recipe: Recipe: Membranūlas ophthalmicas cum Kanamycīni sulfāte 0, 00003 numēro 100

Da. Signa:

II. PREPOSITION “CUM” IN PRESCRIPTIONS

The names of suppositories and ophthalmic films drugs are often used with the preposition “cum” – with. You will have to remember the nouns endings after the preposition “cum” as follows:

- Singular • Nouns of the 2nd declension – ending-o (cum
Ichthyōlo, cum Oxytetracyclīno)
- Plural • Nouns of the 3rd declension – ending-ibus (with
valerian roots - cum radicibus Valeriānae)

The drug names with the nouns of other declensions with the preposition “cum” are not in use.

III. SOLID PHARMACEUTICAL FORMS IN PRESCRIPTIONS

Tablets – Tabulettae

•The prescription regulations for tablets see above.

•There are two prescription forms of tablets:

1. Initially, a drug name with the dose is indicated followed by the phrase “Da tales doses numēro ... in tabulettis” (Give of such doses number ... in a tablet form).
2. The second prescription form begins with the word “Tabulettam”, followed by the drug name and the dose, and ends with the phrase “Da tales doses numēro ...” (Give of such doses number ...).

Compare:

1st prescription form:

Recipe: Paracetamōli 0,3

Da tales doses numēro 6 in tabulettis

Signa: 1 tablet in case of headache

2nd prescription form:

Recipe: Tabulettam Paracetamōli 0,3

Da tales doses numēro 6

Signa: 1 tablet in case of headache

•Tablets known as trade drug names are prescribed as follows: initially the word “Tabulettas” is indicated, the drug name is placed after the pharmaceutical form in Nominative and is in inverted commas, followed by the word “numēro”:

Recipe: Tabulettas “Nicoverīnum” numēro 20

Da. Signa: 1 tablet twice a day

Dragée – Dragée

•The word “dragée” has no declension endings.

•There is only one prescription form for dragée: the word “Dragée”, then a drug name and the phrase “Da tales doses numēro...” (Give of such doses number ...).

Recipe: Dragée Diazolīni 0,05

Da tales doses numēro 20

Signa: 1 dragee twice a day

Powders – Pulvēres

- The Genitive form after “Recipe” – Pulvēris.

- E.g.: Recipe: Pulvēris radīcis Rhei

- Volatile and hygroscopic powders are given out packed in waxed and paraffined paper as indicated in prescriptions:E.g. - Da tales doses numēro... in charta cerāta (Give of such doses number ... in waxed paper).

Granules – Granūla

- “Granūlum” is neutrum.

- The Genitive form after “Recipe” – Granūli (in plural often – Granulōrum).

- E.g.: Recipe: Granulōrum Natrii aminocylātis

a. OTHER PHARMACEUTICAL FORMS IN

PRESCRIPTIONS Capsules – Capsūlae

- Capsule is a drug in powdered, fluid or pellet form that has been enclosed in a soluble gelatin-likecapsule.

- Soft gelatine capsules and Elastic gelatine capsules are distinguished - Capsūlae gelatinōsae molles et durae.

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- In prescriptions the phrase “in capsūlis gelatinōsis” (in gelatine capsules) is indicated.

Ophthalmic films – Membranūlae (Lamellae) ophthalmīcae

- Ophthalmic films are absorbable gelatin films containing drug substances.

- Membranūla and Lamella are synonyms.

- The prescription regulations for ophthalmic films see above.

- The ophthalmic films are often prescribed with the preposition “cum”.

- E.g.: Recipe: Membranūlas ophthalmīcas cum Florenālo.

Aerosols – Aērosōla

•The aerosols are prescribed in the following way: “Recipe” is followed by the word “Aërosolum” (Accusative singular) and by the trade drug name in Nominative and in inverted commas, then the quantity after “numëro” is indicated.

•E.g.: Recipe: Aërosolum “Ephatīnum” numëro 1.

V. THE MOST-USED PRESCRIPTION PHRASES II

- in charta cerāta in waxed paper
- in charta paraffināta in paraffined paper
- in capsulis gelatinōsis in gelatine capsules
- in capsulis gelatinōsis elastīcis in elastic gelatine capsules
- in tabulettis (obductis) in tablets (coated)
- cum radicibus ... with ... roots
- Misce, fiat suppositorium rectāle (vagināle) Mix to make a rectal (vaginal) suppository
- Misce, fiant suppositoria rectalia (vaginalia) Mix to make rectal (vaginal) suppositories
- Misce, fiat pulvis subtilissimus Mix to make the finest powder

VI. VOCABULARY

Learn names of drugs:

1. Analgīnum, i n analgin
2. Corglycōnum, i n corglycon

3. Diprophyllīnum, i n diprophyllin
4. Euphyllīnum, i n euphyllin
5. Florenālum, i n florenal
6. Methyloestradiōlum, i n methyloestradiol
7. Nystatīnum, i n nystatin
8. Phenobarbitālum, i n phenobarbital
9. Phenobolīnum, i n phenobolin
10. Phenoxyethylpenicillīnum, i n phenoxymethylpenicillin
11. Phthivazīdum, i n phthivazid
12. Pyracetāmum, i n pyracetam
13. Saluzīdum, i n saluzid
14. Streptocīdum, i n streptocid
15. Tetracyclīnum, i n tetracycline
16. Iodum, i n iodine

Learn names of medicinal plants:

17. Alōē, es f aloe
18. Althaea, ae f althea
19. Cacao cocoa
20. Millefolīum, i n milfoil

Other words:

21. composītus, a, um complex
22. fluīdus, a, um liquid
23. in tabulettis (obductis) in (coated) tablets
24. obductus, a, um coated
25. ophthalmīcus, a, um ophthalmic
26. simplex, ĭcis simple
27. solubīlis, e soluble

Exercise 1. Read drug names, find component elements carrying information about pharmaceutical characteristics, give their meaning:

Phenoxymethylpenicillinum, Vitoxycyclinum, Hexathidum, Glycerinum, Glycerophosphenum, Isapheninum, Intercainum, Kanacidinum, Erythromycinum, Methacyclinum, Oxacillinum, Metronidazolum, Mechloralum, Neocidum, Novosedum, Oxamycinum, Pentamethonum, Sedalginum, Synthacortum, Sulfurenum, Sulfathiazolum, Theophedrinum, Thiobutalum, Urosulfanum, Urozinum, Phenaconum, Phosphothiaminum, Chlormethinum, Cholosasum, Oestrogynonum, Aethylum, Aethimizolum, Haemoferum, Benzocainum, Abapressinum, Ancortonum, Anaesthocainum, Antistenocardinum, Aseptilexum, Aethylbarbitalum.

Exercise 2. Translate from English into Latin:

Solution of glucose, tablets of analgin, liquid extract of aloe, coated tablets of tetracyclin, tincture of matricary flowers, decoction of oak cortex, liniment of synthomycin, ointment of oxolin, syrup of althea, spirituous solution of iodine, granules of furazolidon, dragee of phenoxymethylpenicillin, solution of furacilin for external use, oily solution of phenobolin, tablets of pyrocetam, powder of ampicillin for suspensions, coated tablets of valerian extract, rhizomes with valerian roots, mucilages of flax seeds, tincture of eucalyptus, infusion of pepper mint leaves, leaf of aloe, leaves of sage, simple syrup, complex plaster, solution of corglycon, oily solution of nitroglycerin, soluble saluzid, powder and tablets of phthivazid, tablets for cough.

Exercise 3. Translate the following prescriptions from English into Latin:

- 1) Take: Powder of foxglove leaves 0,05
 Sacchar 0,3
 Mix to make a powder
 Let it be given of such doses number 12
 Let it be labeled:
- 2) Take: Cortex of hawthorn 30,0
 Leaves of nettle
 Herb of milfoil 10,0
 Mix to make species
 Let it be given
 Let it be labeled:
- 3) Take: Powder of ampicillin for suspensions 60,0
 Give in a dark phial
 Write on a label:
- 4) Take: Suppositories with diprophyllin 0,5 number 10

Give

Write on a label:

- 5) Take: Tablets of microiodine with phenobarbital number 40

Give in a dark phial

Write on a label:

- 6) Take Ointment of tetracycline ophthalmic 10,0

Give

Write on a label:

- 7)Take: Sulfadimezin

Synthomycin

Streptocid of each 1,0

Mix to make a powder Give

Write on a label:

- 8) Take: Tetracycline 100 000 ED

Give of such doses number 24 in a tablet form

Write on a label:

- 9) Take: Euphyllin 0,2

Cocoa oil 2,0

Mix to make a suppository

Give of such doses number 6

Write on a label:

- 10) Take: Ichthyol 3,0

Vaseline up to 30,0

Mix to make an ointment

Give

Write on a label:

- 11) Take: Ointment of furacilin 0,2% - 30,0

Give

Write on a label:

12) Take: Ointment of xeroform 10% - 30,0 Give

Write on a label:

13) Take: Methyloestradiol 0,00002

Give of such doses number 20 in a tablet form

Write on a label:

14) Take: Liquid extract of aloe 1 ml

Give of such doses number 10 in ampoules Write on a label:

15) Take: Synthomycin 0,2 Castor oil 20 ml

Mix to make a liniment Give

Write on a label:

17) Take: Tablets of valerian extract coated 0,02 number 50 Give

Write on a label:

18) Take: Tablet of furacilin 0,02

Give of such doses number 10

Write on a label:

19) Take: Ophthalmic films with florenal number 30

Give

Write on a label:

20) Take: Tablets of sulfadimezin 0,5 number 12 Give

Write on a label:

Sample Test

1. Translate from English into Latin:

oily solution of phenobolin

tablets of pyrocetam,

powder of ampicillin for suspensions,

coated tablets of valerian extract,

rhizomes with valerian roots

mucilages of flax seeds

tincture of eucalyptus

infusion of pepper mint leaves

leaf of aloe, leaves of sage

2. Find component elements carrying information about pharmaceutical characteristics, give their meaning:

Phenoxymethylpenicillinum,

Vitoxycyclinum,

Hexathidum,

Glycerinum,

Glycerophosphenum,

Isapheninum,

Intercainum,

Kanacidinum,

Erythromycinum,

Methacyclinum,

Translate the following prescriptions from English into Latin:

1) Take: Ointment of furacilin 0,2% - 30,0

Give

Write on a label:

2) Take: Methyloestradiol 0,00002

Give of such doses number 20 in a tablet form

Write on a label:

3) Take: Liquid extract of aloe 1 ml

Give of such doses number 10 in ampoules Write on a label:

4) Take: Synthomycin 0,2 Castor oil 20 ml

Mix to make a liniment Give

Write on a label:

5) Take: Ointment of xeroform 10% - 30,0 Give

Write on a label:

Self training for the test in Pharmaceutical terminology

Self training for the test in Pharmaceutical terminology

1. The aim of the lesson:

1) Educational:

- To check the assimilation of the material.
- To form theoretical knowledge on the subject;
- To form practical skills in independent search of the information on the given topic;
- To form practical skills in the work.

Concrete tasks:

A student should know:

1. Standard prescription phrases indicating orders and instructions.
2. Cliniclatin and Greek component elements used in drug names
3. Prescription regulations
- 4 Latin names of chemical elements

A student should be able to:

To write prescriptions.

To form Latin names of drugs.

To translate multiword pharmaceutical forms.

2) Developing aim:

- to perfect cognition skills;
- to develop cognitive interest to the questions of pharmaceutical terminology

TheContent:

I. Translate the following prescriptions from English into Latin:

- 1) Take: Liquid hawthorn extract 25 ml

 Let it be given.

 Let it be labeled:
- 2) Take: Anaesthesin 2,5

 Talc 15,0

 Vaseline up to 50,0

 Mix to make a liniment

 Give.

 Write on a label:
- 3) Take: Tablets of Tetracycline with nystatin coated 100 000 ED

 number 25

 Give.

 Write on a label:
- 4) Take: Sulfadimezin

 Streptocid

 Synthomycin of each 1,0

 Mix to make a powder

 Give.

 Write on a label:
- 5) Take: Powder of ampicillin for suspensions 60,0

 Give in a dark phial

 Write on a label:
- 6) Take: Acetylsalicylic acid

 Phenacetin of each 0,25

Caffeine 0,05

Give of such doses number 12 in a tablet form

Write on a label:

Take: Ichthyol 1,25

Zinc oxide

Wheat starch of each 12,5

Vaseline up to 50,0

Mix to make a paste Give.

Write on a label:

8) Take: Iodine 0,03

Iodide potassium 1,3

Glycerin 30,0

Peppermint oil III drops

Mix. Give.

Write on a label:

9) Take: Magnesium carbonate 4,0

Potassium carbonate 5,0

Sodium hydrocarbonate 1,0

Glycerin in sufficient amount

Mix to make a paste

Give.

Write on a label:

10) Take: Tincture of althea root 180 ml

Sodium hydrocarbonate

Sodium benzoate of each 5,0

Simple syrup 20,0

Mix. Give. Write on a label:

II. Find component elements carrying information about pharmaceutical characteristics of the drug names, give their meaning:

Benzonalum, Dipheninum, Pyrimethaninum, Erythromycinum, Sulfathiazolum,

Sulfamethoxazolum, Vancomycinum, Diphenhydraminum, Cyclosporinum,
Cyanocobalaminum, Methyluracilum, Hydrolysin, Nitroglycerinum,
Benzobarbitalum, Methindionum, Mycoseptinum, Chlorochininum,
Cyclophosphamidum, Cerebrolysinum, Novosedum.

**Latin-EnglishPharmaceutical
Dictionary**

acĭdum acetĭcum

acetic acid

acĭdum acetylsalicylicum
acĭdum ascorbinĭcum

acetylsalicylic acid
ascorbic acid

acĭdum benzoĭcum

benzoic acid

acĭdum borĭcum
acĭdum folĭcum

boric acid
folic acid

acĭdum glutaminĭcum

glutaminic acid

acĭdum hydrochlorĭcum

hydrochloric acid

acĭdum hydrosulfurĭcum

hydrosulfuric acid

acĭdum lactĭcum	lactic acid
acĭdum lipoĭcum	lipoic acid
acĭdum nicotinĭcum	nicotinic acid
acĭdum nitrĭcum	nitric acid
acĭdum nitrōsum	nitrous acid
acĭdum phosphorĭcum	phosphoric acid
acĭdum salicylĭcum	salicylic acid
acĭdum sulfurĭcum	sulfuric acid
acĭdum sulfurōsum	sulfurous acid
adōnis (ĭdis m, f) vernālis (is, e)	spring adonis
adrenalĭnum, ĭ n	adrenalin
aĕrosōlum, ĭ n	aerosol
aether, ĕris m	ether
aethinyloestradiōlum, ĭ n	aethinyloestradiol
aethylĭcus, a, um	ethyl
aethylmorphĭnum, ĭ n	aethylmorphine
albus, a, um	white
alōĕ, es f	aloe
althaea, ae f	althea
amidopyrĭnum, ĭ n	amidopyrin
aminophyllĭnum, ĭ n	aminophyllin
ampicillĭnum, ĭ n	ampicillin
amĕlum (i n) Tritĭci (um, ĭ n)	wheat starch
anaesthesĭnum, ĭ n	anaesthesin
analgĭnum, ĭ n	analgin
antiasthmaticus, a, um	antiasthmatic
apomorphĭnum, ĭ n	apomorphine
aqua, ae f	water

-B-

barbitālum-natriūm, i n	barbital-sodium
belladonna, ae f	belladonna
benzylpenicillīnum-natriūm, i n	benzylpenicillin-sodium
bismūthum, i n	bismuth

-C-

cacao	cocoa
calcīum, i n	calcium
calendūla, ae f	calendula
camphōra, ae f	camphora
capsūla, ae f	capsule
cerebrolysīnum, i n	cerebrolysin
chamomilla, ae f	matricary
chinosōlum, i n	chinosol
chloroformūm, i n	chloroform
chloxylum, i n	chloxyl

codeīnum, i n	codeine
coffeīnum, i n	caffeine
coffeīnum-natriūbenzōas,	coffeine-sodiumbenzoate
coffeīni-natriūbenzoātis	
compositus, a, um	complex
convallariā, ae f	lily of the valley
corglycōnum, i n	corglycon
cortex, ĩcis m	cortex
cortisōnum, i n	cortison
corvalōlum, i n	corvalol

crataegus, i f	hawthorn
	-D-
decoctum, i n	decoction
depurātus, a, um	clear
destillātus, a, um	distilled
dibazōlum, i n	dibazol
dicaīnum, i n	dicain
digitālis, is f	foxglove
dilūtus, a, um	diluted
dimedrōlum, i n	dimedrol
diprophyllīnum, i n	diprophyllin
diuretīcus, a, um	diuretic, urinative
dragée	dragée
	-E-
emplastrum, i n	plaster
emulsum, i n	emulsion
ephedrīnum, i n	ephedrin
eucalyptus, i f	eucalyptus
eucatōlum, i n	eucatol
euphyllīnum, i n	euphyllin
extractum, i n	extract
	-F-
farfāra, ae f	coltsfoot
ferrum, i n	iron
flavus, a, um	yellow
florenālum, i n	florenal

flos, floris m	flower
fluīdus, a, um	liquid
fluōrum, i n	fluorine
folīum, i n	leaf
frangŭla, ae f	buckthorn
furacilīnum, i n	furacilin
furazolidōnum, i n	furazolidon

-G-

glucōsum, i n	glucose
glycerinōsus, a, um	glyceric
granŭlum, i n	granule
gutta, ae f	drop

-H-

hepavītum, i n	hepavit
herba, ae f	herb
hydrargŷrum, i n	mercury
hydrochlorothiazīdum, i n	hydrochlorothiazid
hydrocortisōnum, i n	hydrocortison
hydrogenīum, i n	hydrogen

ichthyōlum, i n infūsum, i n iodum, i n isotonīcus, a, um

kalīum, i n

lamella (ae f) ophthalmīca (us, a, um) leonŭrus, i m linimentum, i n linum, i n

magnesīum, i n magnīum, i n membranŭla (ae f) ophthalmīca (us, a, um) mentha, ae f menthōlum, i n

methylēnum (i n) coerulēum

(us, a, um)

methylīi salicylas, ātis m methyloestradiōlum, i n millefolīum, i n mixtūra, ae f morphīnum, i n

-I-

ichthyol infusion iodine isotonic

-K-

potassium

-L-

ophthalmic film

motherwort liniment flax

-M-

magnesium magnesium ophthalmic film

mint menthol

blue methylen

methyl salicylate methyloestradiol milfoil

mixture morphine

mucilāgo, ĩnis f

mucilage

mycosolōnum, i n

mycosolon

-N-

naphthalānum, i n

naphtalan

natrium, i n

sodium

nitroglycerīnum, i n

nitroglycerin

norsulfazōlum, i n

norsulfazol

novocānum, i n

novocain

nystatīnum, i n

nystatin

-O-

obductus, a, um

coated

oleandomycīnum, i n

oleandomycin

oleōsus, a, um

oily, oil

olĕum (i n) Ricīni (us, i m)

castor oil

olĕum (i n) Helianthi (us, i m)

sunflower-seedoil

olĕum (i n) Persicōrum (um, i n)	peach oil
olĕum, i n	oil
ophthalmīcus, a, um	ophthalmic
oxaphenamīdum, i n	oxaphenamid
oxygeniūm, i n	oxygen
oxytetracyclīnum, i n	oxytetracycline
	-P-
pasta, ae f	paste
pectorālis, e	pectoral
phenacetīnum, i n	phenacetin
phenobarbitālum, i n	phenobarbital
phenobolīnum, i n	phenobolin
phenoxymethylpenicillīnum, i n	phenoxymethylpenicillin
phenylii salicylas, ātis m	phenyl salicylate
phthalazōlum, i n	phthalazol
phthivazīdum, i n	phthivazid
phthorum, i n	fluorine
phthoruracīlum, i n	phthoruracil
pilŭla, ae f	pill
piperītus, a, um	pepper
plantāgo, ĩnis f	common (greated) plantain
plumbum, i n	lead
polyphepānum, i n	polyphepan
prednisolōnum, i n	prednisolon
pulvis, ěris m	powder
pyracetāmum, i n	pyracetam
pyrazidōlum, i n	pyrazidol

-Q-

quercus, us f	oak
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-R-

radix, ĩcis f	root
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rectālis, e	rectal
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rectificātus, a, um	rectificat
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rheum, i n	rhubarb
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rhizōma, ātis n	rhizome
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riboflavīnum, i n	riboflavin
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-S-

sacchārum, i n	sacchar
----------------	---------

salicylas, ātis m	salicylate
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saluzīdum, i n	saluzid
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salvīa, ae f	sage
--------------	------

semen, ĩnis n	seed
---------------	------

siccus, a, um	dry
---------------	-----

simplex, ĩcis	simple
---------------	--------

sirūpus, i m	syrup
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solubīlis, e	soluble
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solutĭo Ammonĭi (um, i n) caustĭci (us, a, um)	liquid ammonia (solution of ammonia)
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solutĭo, ōnis f	solution
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specĭes, ĕrum (plural) f	species
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spirituōsus, a um	spirituous, alcoholic
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spirītus, us m	alcohol
streptocīdum, i n	streptocid
strophanthīnum, i n	strophanthin
sulfacylum-natrīum, i n	sulfacyl-sodium
sulfadimezīnum, i n	sulfadimezin
sulfazīnum, i n	sulfazin
sulfur, ūris n	sulfur
suppositorīum, i n	suppository
suspensio, ōnis f	suspension
synoestrōlum, i n	synoestrol
synthomycīnum, i n	synthomycin

-T-

tabuletta, ae f	tablet
talcum, i n	talc
tannīnum, i n	tannin
testosterōnum, i n	testosteron
tetracyclīnum, i n	tetracycline

thiamīnum, i n	thiamin
tinctūra, ae f	tincture

-U-

unguentum, i n	ointment
urtīca, ae f	nettle

-V-

vaginālis, e	vaginal
valeriāna, ae f	valerian
validōlum, i n	validol

vaselīnum, i n	vaseline
	-X-
xeroformiūm, i n	xeroform
	-Z-
zincum, i n	zinc

English-Latin Pharmaceutical Dictionary

	-A-
acetic acid	aciđum acetīcum
acetylsalicylic acid	aciđum acetylsalicylicum
adrenalin	adrenalīnum, i n
aerosol	aērosōlum, i n
aethinyloestradiol	aethinyloestradiōlum, i n
aethylmorphine	aethylmorphīnum, i n
alcohol	spirītus, us m
alcoholic	spirituōsus, a, um
aloe	alōē, es f
althea	althaea, ae f
amidopyrin	amidopyrīnum, i n
aminophyllin	aminophyllīnum, i n
ampicillin	ampicillīnum, i n
anaesthesin	anaesthesīnum, i n
analgin	analgīnum, i n
antiasthmatic	antiasthmaticus, a, um

apomorphine	apomorphīnum, i n
ascorbic acid	acīdum ascorbinicum
	-B-
barbital-sodium	barbitālum-natrium, i n
belladonna	belladonna, ae f
benzoic acid	acīdum benzoicum
benzylpenicillin-sodium	benzylpenicillīnum-natrium, i n
bismuth	bismūthum, i n
blue methylen	methylēnum (i n) coerulēum (us, a, um)

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boric acid	acīdum boricum
buckthorn	frangūla, ae f
	-C-
caffeine	coffeīnum, i n
calcium	calcium, i n
calendula	calendūla, ae f
camphora	camphōra, ae f
capsule	capsūla, ae f
castor oil	olēum (i n) Ricīni (us, i m)
cerebrolysin	cerebrolysīnum, i n
chinosol	chinosōlum, i n
chloroform	chloroformium, i n
chloxyl	chloxylum, i n
clear	depurātus, a, um
coated	obductus, a, um
cocoa	cacao
codeine	codeīnum, i n

coffeine-sodiumbenzoate	coffeīnum-natrībenzōas, coffeīni-natrībenzoātis
coltsfoot	farfāra, ae f
common (greated) plantain	plantāgo, īnis f
complex	compositus, a, um
corglycon	corglycōnum, i n
cortex	cortex, īcis m
cortison	cortisōnum, i n
corvalol	corvalōlum, i n
	-D-
decoction	decoctum, i n

dibazol	dibazōlum, i n
dicain	dicaīnum, i n
diluted	dilūtus, a, um
dimedrol	dimedrōlum, i n
diprophyllin	diprophyllīnum, i n
distilled	destillātus, a, um
diuretic, urinate	diuretīcus, a, um
dragée	dragée
drop	gutta, ae f
dry	siccus, a, um

-E-

emulsion	emulsum, i n
ephedrin	ephedrīnum, i n
ether	aether, ěris m
ethyl	aethylīcus, a, um

eucalyptus	eucalyptus, i f
eucatul	eucatōlum, i n
euphyllin	euphyllīnum, i n
extract	extractum, i n
	-F-
flax	linum, i n
florenal	florenālum, i n
flower	flos, floris m
fluorine	fluōrum, i n or phthorum, i n
folic acid	acīdum folīcum
foxglove	digitālis, is f
furacilin	furacilīnum, i n
furazolidon	furazolidōnum, i n
	-G-
glucose	glucōsum, i n
glutaminic acid	acīdum glutaminīcum
glyceric	glycerinōsus, a, um
granule	granŭlum, i n
	-H-
hawthorn	crataegus, i f
hepavit	hepavītum, i n
herb	herba, ae f
hydrochloric acid	acīdum hydrochlorīcum
hydrochlorothiazid	hydrochlorothiazīdum, i n
hydrocortison	hydrocortisōnum, i n
hydrogen	hydrogenĭum, i n
hydrosulfuric acid	acīdum hydrosulfurīcum

-I-

ichthyol	ichthyōlum, i n
infusion	infūsum, i n
iodine	iodum, i n
iron	ferrum, i n
isotonic	isotonīcus, a, um

-L-

lactic acid	acīdum lactīcum
lead	plumbum, i n
leaf	folīum, i n
lily of the valley	convallariā, ae f
liniment	linimentum, i n
lipoic acid	acīdum lipoīcum

liquid	fluīdus, a, um
liquid ammonia (solution of ammonia)	of solutiō Ammonīi (um, i n) caustīci (us, a, um)

-M-

magnesium	magnesiūm, i n or magnīum, i n
matricary	chamomilla, ae f
mercury	hydrargyrum, i n
menthol	menthōlum, i n
methyl salicylate	methylii salicylas, ātis m
methyloestradiol	methyloestradiōlum, i n
milfoil	millefolīum, i n
mint	mentha, ae f
mixture	mixtūra, ae f

morphine	morphīnum, i n
motherwort	leonūrus, i m
mucilage	mucilāgo, īnis f
mycosolon	mycosolōnum, i n
-N-	
naphtalan	naphthalānum, i n
nettle	urtīca, ae f
nicotinic acid	acīdum nicotinīcum
nitric acid	acīdum nitrīcum
nitroglycerin	nitroglycerīnum, i n
nitrous acid	acīdum nitrōsum
norsulfazol	norsulfazōlum, i n
novocain	novocaīnum, i n
nystatin	nystatīnum, i n

-O-

oak	quercus, us f
oil	olēum, i n
oily, oil	oleōsus, a, um
ointment	unguentum, i n
oleandomycin	oleandomycīnum, i n
ophthalmic	ophthalmīcus, a, um
ophthalmic film	lamella (ae f) (membranŭla (ae f)) ophthalmīca (us, a, um)
oxaphenamid	oxaphenamīdum, i n
oxygen	oxygenīum, i n
oxytetracycline	oxytetracyclīnum, i n

-P-

paste	pasta, ae f
peach oil	olĕum (i n) Persicōrum (um, i n)
pectoral	pectorālis, e
pepper	piperītus, a, um
phenacetin	phenacetīnum, i n
phenobarbital	phenobarbitālum, i n
phenobolin	phenobolīnum, i n
phenoxymethylpenicillin	phenoxymethylpenicillīnum, i n
phenyl salicylate	phenylī salicylas, ātis m
phosphoric acid	acīdum phosphorīcum
phthalazol	phthalazōlum, i n
phthivazid	phthivazīdum, i n
phthoruracil	phthoruracīlum, i n
pill	pilŭla, ae f

plaster	emplastrum, i n
polyphepan	polyphepānum, i n
potassium	kalīum, i n
powder	pulvis, ěris m
prednisolon	prednisolōnum, i n
pyracetam	pyracetāmum, i n
pyrazidol	pyrazidōlum, i n

-R-

rectal	rectālis, e
rectificat	rectificātus, a, um
rhizome	rhizōma, ātis n
rhubarb	rheum, i n
riboflavin	riboflavīnum, i n

root	radix, ģicis f
	-S-
sacchar	sacchārum, i n
sage	salvīa, ae f
salicylate	salicylas, ātis m
salicylic acid	acīdum salicylicum
saluzid	saluzīdum, i n
seed	semen, ģinis n
simple	simplex, ģicis
sodium	natrium, i n
soluble	solubīlis, e
solution	solutiō, ōnis f
species	speciēs, ģerum (plural) f
spirituous, alcoholic	spirituōsus, a um
spring adonis	adōnis (ģidis m, f) vernālis (is, e)

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streptocid	streptocīdum, i n	
strophanthin	strophanthīnum, i n	
sulfacyl-sodium	sulfacylum-natrium, i n	
sulfadimezin	sulfadimezīnum, i n	
sulfazin	sulfazīnum, i n	
sulfur	sulfur, ūris n	
sulfuric acid	acīdum sulfurīcum	
sulfurous acid	acīdum sulfurōsum	
sunflower-seedsoil	olĕum (i n) Helianthi (us, i m)	
suppository	suppositorium, i	n
suspension	suspensiō, ōnis	f

synoestrol	synoestrōlum, i n
synthomycin	synthomycīnum, i n
syrup	sirūpus, i m

-T-

tablet	tabuletta, ae f
talc	talcum, i n
tannin	tannīnum, i n
testosteron	testosterōnum, i n
tetracycline	tetracyclīnum, i n
thiamin	thiamīnum, i n
tincture	tinctūra, ae f

-V-

vaginal	vaginālis, e
valerian	valeriāna, ae f
validol	validōlum, i n
vaseline	vaselīnum, i n

-W-

water	aqua, ae f
wheat starch	amŷlum (i n) Tritīci (um, i n)
white	albus, a, um

-X-

xeroform	xeroformiūm, i n
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-Y-

yellow	flavus, a, um
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-Z-

zinc	zincum, i n
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Common Abbreviations Used in

Prescriptions

This appendix is meant to be a complete list of all abbreviations used in prescriptions in English-speaking countries (its listing here does not mean such abbreviations should be used).

- aa (ana) - of each
- ad - to, up to
- a.c. (ante cibium) - before meals
- a.d. (aurio dextra) - right ear
- ad lib. (ad libitum) - use as much as one desires; freely
- admov. (admove) - apply
- agit (agita) - stir/shake
- alt. h. (alternis horis) - every other hour
- a.m. (ante meridian) - morning, before noon
- amp - ampule
- amt - amount
- aq (aqua) - water
- a.l., a.s. (aurio laeva, aurio sinister) - left ear
- A.T.C. - around the clock
- a.u. (auris utrae) - both ears
- bis (bis) - twice
- b.i.d. (bis in die) - twice daily
- B.M. - bowel movement
- bol. (bolus) - a large pill
- B.S. - blood sugar
- B.S.A - body surface areas
- cap., caps. (capsula) - capsule
- c (cum) - with (usually written with a bar on top of the "c")
- c (cibos) - food

- cc - cubic centimetre; also means "with food" (cum cibos)

- cf - with food
- C.H.F. - congestive heart failure
- comp. - compound
- cr., crm - cream
- D5W - dextrose 5% solution (sometimes written as D5W)
- D5NS - dextrose 5% in normal saline (0.9%)
- D.A.W. - dispense as written
- dc, D/C, disc - discontinue
- dieb. alt. (diebus alternis) - every other day
- dil. - dilute
- disp. - dispense
- div. - divide
- d.t.d. (dentur tales doses) - give of such doses
- D.W. - distilled water
- elix. - elixir
- e.m.p. (ex modo prescripto) - as directed
- emuls. (emulsum) - emulsion
- et - and
- ex aq - in water
- fl., fld. - fluid
- ft. (fiat) - make; let it be made
- g - gram
- G.I. - gastrointestinal
- gr - grain
- gtt(s) (gutta(e)) - drop(s)
- G.U. - genitourinary
- H - hypodermic
- h, hr - hour
- H.A. - headache

- H.B.P. - high blood pressure
- h.s. (hora somni) - at bedtime
- HTN - hypertension
- ID - intradermal
- IM - intramuscular (with respect to injections)
- inj. (injectio) - injection
- IP - intraperitoneal
- IV - intravenous
 - o IVP - intravenous push
 - o IVPB - intravenous piggyback
- L.A.S." - label as such
- LCD - coal tar solution
- lin (linimentum) - liniment
- liq (liquor) - solution
- lot. - lotion
- M. (misce) - mix
- m, min (mininum) - a minimum
- mcg - microgram
- mEq - milliequivalent
- mg - milligram
- mist. (mistura) - mix
- mitte (mitte) - send
- mL - millilitre
- N&V, N/V - nausea and vomitting
- nebul (nebula) - a spray
- N.K.A. - no known allergies
- N.K.D.A. - no known drug allergies
- N.M.T. - not more than
- noct. (nocte) - at night
- non rep. (non repetatur) - no repeats

- NPO, n.p.o. (non per os) - nothing by mouth
- NS - normal saline (0.9%)
- 1/2NS - half normal saline (0.45%)
- N.T.E. - not to exceed
- o₂ - both eyes, sometimes written as o₂
- o.d. (oculus dexter) - right eye
- o.s. (oculus sinister) - left eye
- o.u. (oculo utro) - both eyes
- oz - ounce
- per - by or through
- p.c. (post cibium) - after meals
- p.m. (post meridian) - evening or afternoon
- prn (pro re nata) - as needed
- p.o. (per os) - by mouth or orally
- p.r. - by rectum
- pulv. (pulvis) - powder
- q (quaque) - every
- q.a.d. (quaque alternis die) - every other day
- q.h. (quaque hora) - every hour
- q.1h (quaque 1 hora) - every 1 hour; (can replace "1" with other numbers)
- q.d. (quaque die) - every day
- q.i.d. (quater in die) - four times a day
- q.o.d. - every other day
- q.s. (quantum sufficiat) - a sufficient quantity
- R- rectal
- rep., rept. (repetatur) - repeats
- RL, R/L - Ringer's lactate
- s (sine) - without (usually written with a bar on top of the "s")

•s.a. (secundum artum) - use your judgement

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•SC, subc, subq, subcut - subcutaneous

•sig - write on label

•SL - sublingually, under the tongue

•S.O.B. - shortness of breath

•sol (solutio) - solution

•s.o.s., si op. sit (si opus sit) - if there is a need

•ss (semis) - one half

•stat (statim) - immediately

•supp (suppositorium) - suppository

•susp - suspension

•syr (syrupus) - syrup

•tab (tabella) - tablet

•tal., t (talus) - such

•tbsp - tablespoon

•troche (trochiscus) - lozenge

•tsp - teaspoon

•t.i.d. (ter in die) - three times a day

•t.i.w. - three times a week

•top. - topical

•T.P.N. - total parenteral nutrition

•tr, tinc., tinct. - tincture

•u.d., ut. dict. (ut dictum) - as directed

•ung. (unguentum) - ointment

•U.R.I. - upper respiratory infection

•U.T.I. - urinary tract infection

•vag - vaginally

•V.S. - vital signs

•w - with

•W.B.C. - white blood count

•w/o - without

X - times

Y.O. - years old

Sample of the Examination Card

I. Translate from English into Latin the following anatomical terms:

- | | |
|-----------------------------------|---|
| 1. joints of rib's head; | 5. anterior intercostal veins; |
| 2. major and minor horns; | 6. nerve nodes of sympathetic networks; |
| 3. superficial lymphatic vessels; | 7. minor palatine canals; |
| 4. widest muscle of back; | 8. external occipital protuberance. |

II. Form the Greek / Latin clinical terms according to the meanings:

- | | |
|-----------------------------|-----------------------------|
| 1. lack of hair | 6. removal of gallbladder |
| 2. study of life | 7. inflammation of tear sac |
| 3. disease of blood vessels | 8. disturbance of vision |
| 4. fear of cancer | 9. fixation of the uterus |
| 5. bleeding from the lip | 10. one finger on the hand |

III. Explain the meaning of the following clinical terms:

- | | |
|------------------|--------------------|
| 1. myopathia | 6. lipoma |
| 2. hypokinesia | 7. melanuria |
| 3. pyelocystitis | 8. myelogramma |
| 4. gastroscopia | 9. microencephalia |
| 5. interosseus | 10. nephroma |

IV. Translate the prescriptions from English into Latin:

Take: Solution of glucose 5% - 500 ml

Let it be sterilized!

Give.

Write on a label:

Take: Euphyllin 0,2

Cacao oil 2,0

Mix to make suppository

Give of such doses number 6

Write on a label:

V. Find in the drug names component elements carrying information about pharmaceutical characteristics:

- | | |
|---------------------|-----------------|
| 1. Erythromycinum | 4. Benzonalum |
| 2. Pyocidum | 5. Chloraminum |
| 3. Thiophosphamidum | 6. Sarcolysinum |

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