



**CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU
STUDII UNIVERSITARE**

Redacția: 09
DATA: 08.09.2021
PAG. 1/17

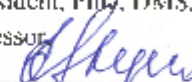


**CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU
STUDII UNIVERSITARE**

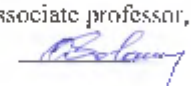
Redacția: 09
DATA: 08.09.2021
PAG. 1/17

**FACULTY OF STOMATOLOGY
STUDY PROGRAM IN 0911.1 STOMATOLOGY
DEPARTMENT OF ORTHODONTICS**

APPROVED


at the meeting of the Committee for Quality Assurance and Evaluation of the Curriculum Faculty of Stomatology Minutes No. 1 of 23.09.2021
Committee president, PhD, DMS, Associate professor
Stepco Elena 

APPROVED

at the Council meeting of the Faculty of Stomatology Minutes No. 2 of 12.10.2021
Dean of the Faculty of Stomatology PhD, DMS, Associate professor,
Solomon Oleg 

APPROVED

at the meeting of the Department of orthodontics
Minutes No. 1 of 24 august 2021

Head of the Department,
PhD, DMS, Associate professor
Trifan Valentina 



**CURRICULUM
DISCIPLINE ORTHODONTICS**

Integrated studies

Type of course: **Compulsory discipline**

Chisinau, 2021



CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU STUDII UNIVERSITARE

Redacția:	09
DATA:	08.09.2021
PAG. 2/17	

I. PRELIMINARY

- **General presentation of the discipline: place and role of the discipline in the formation of the specific competences of the vocational / specialty training program:**

Orthodontics - clinical discipline, the study of which at the university stage allows the future dentist to acquire the diagnosis, clinical picture, treatment and prevention of dento-maxillary anomalies and to organize orthodontic care in patients with congenital malformations. In this module, the vertical and transversal malocclusions, relapse manifestations and contention as a passive period of orthodontic treatment are studied further. The same is true of the orthodontic treatment of dento-maxillary abnormalities as well as some aspects encountered in certain facial deformation syndromes. This discipline also addresses the particularities of the orthodontic treatment by fixed devices and the particularities of the teeth and dental arches in children, important moments in orthodontic care.

The Orthodontics discipline strategy is to provide the necessary information in the diagnosis and treatment of dento-maxillary abnormalities based on dentition, application of knowledge to the level of contemporary requirements to help improve the efficiency of orthodontic care.

- **The mission of the curriculum (scope) in training:**

Students' theoretical and practical training on prevention, diagnosis, clinical manifestations and treatment of dento-maxillary anomalies.

- **Language of instruction:** Romanian, English.
- **Beneficiaries:** students of the fifth year, X semester of the Faculty of Stomatology.



**CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU
STUDII UNIVERSITARE**

Redacția:	09
DATA:	08.09.2021
PAG. 3/17	

II. ADMINISTRATION OF THE DISCIPLINE

Code of discipline		S.10.O.122	
Name of the discipline		Orthodontics	
Responsible for the discipline		Trifan Valentina , PhD, associate professor Mihailovici Gheorghe , PhD, associate professor Lazarev Evghenii , university assistant	
Year	5	semester	X
Total hours including:			90
Course	20	Practical work	35
Seminars	15	Individual work	20
Evaluation form	C	Number of credits	3



CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU STUDII UNIVERSITARE

Redacția:	09
DATA:	08.09.2021
PAG. 4/17	

III. TRAINING OBJECTIVES IN THE DISCIPLINE

● *at the level of knowledge and understanding:*

- ✓ know the basics of orthodontics;
- ✓ to know the etiology, clinical manifestations and diagnosis, methods of diagnosis of physiological and pathological dental occlusions according to the reference plans.

● *at application level:*

- ✓ perform the clinical examination of the orthodontic patient;
- ✓ to determine symmetry and proportionality of the face, anthropometric indices;
- ✓ perform sounding, percussion and appreciation of tooth mobility;
- ✓ to supplement the dental formula in children of different ages;
- ✓ determine the post-lacteal plane in the temporary dentition, the molar relationship in the mixed and permanent dentition;
- ✓ possess the determination of static and dynamic occlusion in orthodontic patients;
- ✓ determine and interpret biometric indices on the model of study;
- ✓ apply methods of diagnosing dento-maxillary anomalies in children and adolescents;
- ✓ interpret contact radiograms, orthopantomograms;
- ✓ perform selective grinding as a method of interceptive treatment;
- ✓ make impressions of jaws;
- ✓ perform casting and stitching of diagnostic models;
- ✓ have space maintainer adjustment;
- ✓ to know the contemporary methods of diagnosis and treatment of maxillary dento anomalies in the three reference plans;
- ✓ solve clinical situation problems.

● *integration level*

- ✓ appreciate the importance of orthodontics in the context of dentistry, medicine;
- ✓ to address creatively the problems of fundamental and clinical medicine;
- ✓ to deduce interrelations between orthodontics and other clinical disciplines; have skills to implement and integrate knowledge gained from clinical disciplines;
- ✓ be able to objectively evaluate and self-assess the knowledge in the field of dentistry;
- ✓ be able to assimilate and apply new achievements in Orthodontics;
- ✓ be able to implement the knowledge gained in the research activity;
- ✓ be competent to use critical and reliable scientific information obtained using the new information and communication technologies;
- ✓ be able to use multimedia technology to receive, evaluate, store, produce, present and exchange information, and communicate and participate in networks via the Internet;
- ✓ be able to acquire the totality of the didactic material, which will contribute to the management of the professional path.



CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU STUDII UNIVERSITARE

Redacția:	09
DATA:	08.09.2021
PAG. 5/17	

IV. PRIOR CONDITIONS AND REQUIREMENTS

Good knowledge of the subject is required in the field of fundamental medicine, therapeutic dentistry, orthopedic dentistry, oral and maxillofacial surgery, etc.

Student of year V needs to meet the following criteria:

- knowledge of the language of instruction;
- confirmed competences in lyceum sciences (biology, chemistry, physics);
- digital competences (use of the Internet, document processing, electronic tables and presentations, use of graphic programs);
- skills obtained in preclinical and clinical dental disciplines: dental propedeutics; dentistry; orthopedic dentistry; prophylaxis of dental affections;
- ability to communicate and team work;
- qualities - tolerance, compassion, autonomy.



**CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU
STUDII UNIVERSITARE**

Redacția: 09
DATA: 08.09.2021
PAG. 6/17

V. TOPIC AND THE APPROXIMATE DISTRIBUTION OF HOURS

A. Courses (lectures):

Nr. d/o	Theme	Number of hours
1.	Vertical malocclusion. Deep occlusion and vertical inoclusion. Etiology, pathogenesis, clinical varieties, diagnostic and treatment methods.	6
2.	Transversal malocclusions. Possible causes, clinical forms, treatment methods. The particularities of the orthodontic treatment of children with labio-maxilo-palatine clefts.	4
3.	Fixed orthodontic appliances, components, methods and particularities of the treatment of orthodontic patients by fixed devices.	4
4.	Extraoral forces in orthodontics. General principles. Indications. Characteristics: force action, magnitude, duration, directions. Tooth extraction in orthodontics. Indications and contraindications. Analytical factors in the use of tooth extraction. Preprosthetic orthodontic treatment.	2
5.	Contentions in orthodontics. Definition, duration of contention depending on the dento-maxillary anomalies. Relapse in the treatment of dento-maxillary anomalies.	4
TOTAL		20

B. Practical work, seminars:

Nr. d/o	Theme	Number of hours		
		Seminars	Practical	Individual
1.	Terminology in orthodontics. Classification and diagnosis of dento-maxillary abnormalities. Angle Classification. Classification of the French school (Cauhepe). Classification of the German school.	1	3	2
2.	Vertical malocclusions. Deep occlusion. Definition, frequency, etiology, pathogenesis, clinical aspects by age. Diagnostic methods. Methods of treatment used in deep occlusion syndrome. The importance of periods of physiological elevation of occlusion. Period of contention.	2	4	3
3.	Vertical inoclusion. Definition, frequency, etiology, pathogenesis, clinical forms. Diagnostic methods. Targets of the treatment in vertical inoclusion syndrome by age. Prophylactic treatment.	2	4	2
4.	Transverse malocclusions. Definition, etiology, clinical forms. Diagnostic methods. Prognosis. The treatment of transverse malocclusions. Prophylactic, etiologic, symptomatic treatment. Period of contention.	2	4	3



**CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU
STUDII UNIVERSITARE**

Redacția: 09

DATA: 08.09.2021

PAG. 7/17

5.	Dento-maxillary anomalies caused by congenital malformations. Diagnostic methods. The particularities of the orthodontic treatment of children with labio-maxilo-palatine clefts.	2	4	2
6.	Fixed orthodontic appliances. General feature. Advantages, disadvantages. General notions about treatment methods with fixed devices. Characteristics of the active, aggregation elements and accessories of fixed appliances. Special resins.	2	4	2
7.	Extraoral forces in orthodontics. General principles. Indications. Types, directions, magnitude, duration of the action.	1	4	2
8.	Tooth extraction in orthodontics. Indications and contraindications. Analytical factors in the use of tooth extraction. Preprosthetic orthodontic treatment.	2	4	2
9.	Retention in orthodontics. Definition, duration of retention depending on the dento-maxillary anomalies. Relapse in the treatment of dento-maxillary anomalies. Definition, general causes, local causes.	1	4	2
TOTAL		15	35	20



CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU STUDII UNIVERSITARE

Redacția: 09

DATA: 08.09.2021

PAG. 8/17

VI. REFERENCE OBJECTIVES AND CONTENTS UNITS

Theme (Chapter)1. Terminology in orthodontics. Classifications of dento-maxillary abnormalities. Angle Classification. Classification of the French school (Cauhepe). Classification of the German school.

Objectives	Content units
<ul style="list-style-type: none">to know the classification of dental-maxillary anomalies by Angle;to know the basic terminology in formulating the dento-maxillary anomaly;to know the classification of dento-maxillary anomalies according to various principles;to apply the knowledge and skills regarding child psychosomatic development at different ages;to develop own opinions on the individual peculiarities of the growing child;examine children of different ages;apply the knowledge acquired to other disciplines;to draw conclusions.	Main compartments of discipline. orthodontics - a compartment of dentistry. Classification of dento-maxillary abnormalities. Disadvantages of Angle's classification.

Theme (Chapter) 2. Vertical malocclusions. Deep occlusion. Definition, frequency, etiology, clinical aspects by age. Diagnostic methods. Methods of treatment used in deep occlusion syndrome. The importance of periods of physiological elevation of occlusion. Period of contention.

Objectives	Content units
<ul style="list-style-type: none">to define the notion of dental occlusion;to know the varieties of dental occlusion according to dentition;to know the etiology, pathogenesis, risk factors in the appearance of vertical malocclusions;to know the particularities of the clinical evolution of deep occlusion;to know the etiology and pathogens of vertical malocclusions;to perform the clinical examination of dental occlusion according to the teeth;to perform the photostatic, biometric and anthropometric examinations that define deep occlusion;to know the cephalometric parameters confirming deep occlusion;to formulate conclusions.	The morpho-functional features of deep occlusion depending on the teeth. Clinical manifestations of malocclusions in the three reference plans. Methods of diagnosis and treatment of deep occlusion. The prediction and period of contention of malocclusion.



**CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU
STUDII UNIVERSITARE**

Redacția: 09

DATA: 08.09.2021

PAG. 9/17

Theme (Chapter) 3. Vertical inooclusion. Definition, frequency, etiology, clinical forms. Diagnostic methods. Targets of treatment in vertical inooclusion syndrome by age. Prophylactic treatment.

Objectives	Content units
<ul style="list-style-type: none">• to know the definition of vertical inoculation;• to be able to perform the exobucal and endobucal clinical examination in patients with vertical inoculation;• to be able to perform photometric examinations;• to be able to impressions with alginate masses of the upper and lower jaws;• to be able to cast the gypsum patterns and their sockets;• to be able to carry out the biometric study of diagnostic models;• to know the cephalometric parameters confirming the diagnosis of vertical inoculation;• to know the diagnostic and treatment objectives in vertical inoculation;• to formulate conclusions.	<p>Clinical manifestations of vertical inoculation.</p> <p>Methods of diagnosis and orthodontic treatment of vertical inoculation in children according to dentition.</p> <p>Containment devices required to be used.</p>

Theme (Chapter) 4. Transverse malocclusions. Definition, etiology, clinical forms. Diagnostic methods. Prognosis. The treatment of transverse malocclusions. Prophylactic, etiologic, symptomatic treatment. Period of contention.

Objectives	Content units
<ul style="list-style-type: none">• to know the definition of transversal malocclusion;• to be able to perform the exobucal and endobucal clinical examination in patients with transversal malocclusion;• to be able to perform the photometric exam in facial projection;• to be able to impressions with alginate masses of the upper and lower jaws;• to be able to cast the gypsum patterns and their sockets;• to be able to carry out the biometric study of diagnostic models;• to know the cephalometric parameters confirming the diagnosis of cross occlusion;• to know the diagnostic objectives of transversal malocclusions;• to formulate conclusions.	<p>Etiological factors, exo-and endobucal signs within cross-occlusion.</p> <p>Diagnostic methods of translocal malocclusions in children based on dentition.</p> <p>Differential diagnosis in different forms of transverse malocclusions.</p>



**CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU
STUDII UNIVERSITARE**

Redacția:	09
DATA:	08.09.2021
PAG. 10/17	

Theme (Chapter) 5. Dento-maxillary anomalies caused by congenital malformations. Diagnostic methods. The particularities of the orthodontic treatment of children with labio-maxilo-palatine clefts.

Objectives	Content units
<ul style="list-style-type: none">• to know the definition of congenital malformation;• to be able to perform the exobuccal and endobuccal clinical examination in patients with labio-maxilo-palatine clefts;• to be able to perform the photometric exam in facial projection;• to be able to impressions with alginate masses of the upper and lower jaws;• to be able to cast the gypsum patterns and their sockets;• to be able to carry out the biometric study of diagnostic models;• to know the cephalometric parameters confirming the dento-maxillary abnormality;• to know the diagnostic and treatment objectives of congenital malformations;• to formulate conclusions.	DLMP Classification. Primary and secondary etiologic factors that induce malformation. General disorders in patients with congenital malformations. Methods of diagnosis and treatment of congenital malformations in children based on dentition.

Theme (Chapter) 6. Fixed orthodontic appliances. General feature. Advantages, disadvantages. General notions about treatment methods with fixed devices. Characteristics of the active, aggregation elements and accessories of fixed appliances. Special resins.

Objectives	Content units
<ul style="list-style-type: none">• to define the notion of a fixed orthodontic appliance;• to know the components of fixed devices;• to know the composition of the materials from which they are made;• to know the methods of treatment by fixed devices;• to be able to trace the treatment objectives through fixed devices;• to formulate conclusions.	Instructions for the use of fixed orthodontic appliances. Collage of adhesive technique. Methods of orthodontic treatment by fixed orthodontic appliances.

Theme (Chapter) 7. Extraoral forces in orthodontics. General principles. Indications. Types, directions, magnitude, duration of the action.

Objectives	Content units
-------------------	----------------------



**CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU
STUDII UNIVERSITARE**

Redacția: 09

DATA: 08.09.2021

PAG. 11/17

- to define the notion of extraoral force;
- to know the varieties of extraoral forces in malocclusion;
- to know the general principles of action through extra-territorial forces;
- to be able to determine the need to use extraoral forces based on cephalometric parameters;
- to formulate conclusions.

Classification of extraoral forces.
Indication of the onset of extraoral forces in orthodontics.
Extraoral anchor types.
Methods of treatment using extraoral forces.

Theme (Chapter) 8. Tooth extraction in orthodontics. Indications and contraindications. Analytical factors in the use of tooth extraction. Preprosthetic orthodontic treatment.

Objectives

Content units

- to know how to create space on the dental arch;
- to be able to determine the need for dental extraction depending on malocclusion;
- to know contraindications to dental extraction;
- to be able to carry out the biometric study to assess the gap in the dental arcade;
- to formulate conclusions.

Analysis factors for the use of orthodontic dental extraction.
Serial extraction, indications.
Complex treatment methods of dento-maxillary anomalies.

Theme (Chapter) 9. Retention in orthodontics. Definition, duration of retention depending on the dento-maxillary anomalies. Relapse in the treatment of dento-maxillary anomalies. Definition, general causes, local causes.

Objectives

Content units

- to know the indications for dental prosthesis in children;
- to know the variety of prosthetic constructions indicated for patients in the growing period;
- to know the mobile space keepers;
- to know the fixed space keepers;
- to be able to describe a space keeper;
- to formulate conclusions.

Early loss of teeth in children.
Particulars of prosthesis in children during growth.
Individualization of prosthetic. treatment in children.



CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU STUDII UNIVERSITARE

Redacția:	09
DATA:	08.09.2021
PAG. 12/17	

VII. PROFESSIONAL COMPETENCES (CY) AND TRANSVERSAL (CT) COMPETENCES AND STUDY FINDINGS

✓ PROFESSIONAL COMPETENCES (SPECIFIC) (CS)

- CP1. Knowledge of the morpho-functional peculiarities of malocclusions in the vertical and transversal plane of the children according to the teeth.
- CP2. Elaboration of the diagnostic plan, treatment objectives and means of preventing malocclusions in the three reference plans.
- CP3. Using modern complementary diagnostic methods and digital technologies in providing orthodontic assistance.
- CP4. Perform practical exercises and complementary examinations in the diagnosis, treatment and prevention of dento-maxillary abnormalities in children based on knowledge from the fundamental and clinical disciplines (including dentistry).
- CP5. Planning, coordinating and conducting health promotion activities and prophylactic measures to reduce the severity of dento-maxillary abnormalities in children at the individual and community level, the establishment and implementation of complex dispensary plans applicable in school and pre-school colleges.
- CP6. Implementation of professional standards for evaluation and quality assurance of orthodontic assistance of children with dento-maxillary abnormalities. Knowledge of the basic principles and functional structure of the medical and dental care especially for the children of the Republic of Moldova.

✓ TRANSVERSAL COMPETENCES (CT)

- CT1. Applying professional standards of assessment, acting according to professional ethics, as well as the provisions of the legislation in force. Promoting logical reasoning, practical applicability, assessment and self-assessment in decision-making.
- CT2. Performing activities and exercising the roles specific to team work in medical institutions and especially in dental care. Promoting the spirit of initiative, dialogue, cooperation, positive attitude and respect for others, empathy, altruism and continuous improvement of their own activity.
- CT3. Systematic assessment of personal competencies, roles and expectations, application of self-assessments of learned processes, acquired skills and professionalism needs, knowledge in information technologies, effective use of language skills, research and communication skills to provide quality dental services and adapting to the dynamics of policy requirements in health and for personal and professional development.



CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU STUDII UNIVERSITARE

Redacția:	09
DATA:	08.09.2021
PAG. 13/17	

✓ FINALY OF STUDY

The student at the end of the course will be able to:

- be able to determine the variety of malocclusion according to the reference plane based on cephalometric analysis;
- to perform the exobucal and endobucal clinical examination in children with dento-maxillary anomaly;
- to know and to apply the classic and complementary methods in the diagnosis of dento-maxillary anomalies in children during the growing period;
- to make optimal decisions in providing orthodontic assistance to children with dento-maxillary abnormalities;
- to know the treatment objectives of dento-maxillary anomalies according to the teeth;
- be able to make a condom for stabilizing the orthodontic result;
- be able to achieve a space maintainer in growing patients;
- apply various ways of psychological and moral support of children in the treatment of dento-maxillary anomalies.



CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU STUDII UNIVERSITARE

Redacția: 09

DATA: 08.09.2021

PAG. 14/17

VIII. THE STUDENT'S INDIVIDUAL WORK

One of the least effective methods of pedagogical learning is passive obedience to courses, but practical performance is much more effective. For these reasons, Orthodontics discipline is the individual practice activity of each student with the guidance of the teachers.

Nr.	The expected product	Implementation Strategies	Evaluation criterias	Deadline
1.	Working with books and ICT	Work systematically in the library and mediate. Exploring current electronic sources on the subject.	1. Quality of formed judgments, logical thinking, flexibility. 2. The quality of the systematization of the informational material obtained through its own activity.	During the semester
2.	Report	Analysis of relevant sources on the topic of the paper. Analysis, systematization and synthesis of information on the proposed theme. Compilation of the report in accordance with the requirements in force and presentation to the chair.	1. The quality of systematization and analysis of the informational material obtained through its own activity. 2. Concordance of information with the proposed theme.	During the semester
3.	Case study analysis	Selection and description of the case study with malocclusions in the vertical and transversal plane. Analysis of the causes of the issues raised in the case study. Prognosis of the case investigated. Deduction of the expected outcome of the case.	1. Analysis, synthesis, generalization of data obtained through own investigation. 2. Formation of an algorithm of knowledge based on the obtained conclusions.	During the semester



CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU STUDII UNIVERSITARE

Redacția:	09
DATA:	08.09.2021
PAG. 15/17	

IX. METHODOLOGICAL SUGGESTIONS FOR TEACHING- LEARNING-EVALUATION

- ***Methods of teaching and learning used***

The discipline of Orthodontics is taught in classical ways: with lectures and practical works. At the lectures the theoretical course is read by the course holders. In practical work students study the particularities of dental care for children, diagnosis, clinical picture, treatment and prevention of dento-maxillary anomalies in children.

In order to acquire deeper material, different semiotic systems (scientific language, graphical and computerized language) and teaching materials (tables, diagrams, photophotographs, transparencies) are used. Inside lessons and extracurricular activities are used Communication Technologies - PowerPoint presentations.

- ***Applied didactic strategies / technologies (discipline specific)***

Exposure, interactive lecture, group interview, debate, creative controversy, problem-solving, brainstorming, group work, individual study, work with textbook and manual, case study, problem solving, role play, simulation, interactive listening.

- **Methods of evaluation (including an indication of how the final grade is calculated)**

Current: front and / or individual control via

- (a) the application of docimological tests,
- (b) solving problems / exercises,
- (c) analysis of case studies
- (d) playing role plays on the topics discussed.
- (e) quiz

Final: Exam

At the Department of orthodontics, the Orthodontic, X semester course ends with exam.

To the exam is not admitted the students with the average annual note under 5, as well as students who have not recovered absences from seminars and practical lessons.

The V-year promotion exam on Orthodontics is combined, consisting of the test-control SIMU and oral part.

The average annual note is based on 3 totals, and the practical test is the average of the notes of the clinical case study and of the practical lessons from the lessons.

The test part consists of variants of 100 tests each of all subjects of the orthodontics discipline. For the oral exam 60 questions are selected and 30 tickets are prepared. Each ticket contains 3 questions. The oral exam is evaluated with grades from 1 to 10.

The final grade is calculated based on: annual average grade 50%, control-test grade 20%, oral exam grade 30%.



**CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU
STUDII UNIVERSITARE**

Redacția: 09

DATA: 08.09.2021

PAG. 16/17

Methods of mark rounding

The average of current and final marks	Final mark	Equivalent ECTS
1,00-3,00	2	F
3,01-4,99	4	FX
5,00	5	E
5,01-5,50	5,5	
5,51-6,0	6	
6,01-6,50	6,5	D
6,51-7,00	7	
7,01-7,50	7,5	C
7,51-8,00	8	
8,01-8,50	8,5	B
8,51-8,00	9	
9,01-9,50	9,5	A
9,51-10,0	10	

***Note:** Not presenting of the exam without good reason is recorded as "absent" and is equivalent to the 0 (zero). The student is entitled to 2 repeated claims of the unsuccessful exam.*



CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU STUDII UNIVERSITARE

Redacția:	09
DATA:	08.09.2021
PAG. 17/17	

X. RECOMMENDED BIBLIOGRAPHY

A. Obligatory:

1. Avornic Lucia. Factori etiologici și de risc ai anomaliilor dento-maxilare. Recomandare metodică. Chișinău, 2019, 26 p.
2. Dorobăț V., Stanciu D. Ortodonție și ortopedie dento-facială. Editura Medicală, București, 2014, 502 p.
3. Fratu Aurel V. Ortodonție – Diagnostic. Clinică. Tratament, Iași, Editura Vasiliana'98, 2002.
4. Graber T., Vanarsdall R., Vig K. Orthodontics, 4th Edition – Current Principles and Techniques. Ed. C. V. Mosby Comp. St. Louis, 2005, 1232 p.
5. Mihailovici Gh. Ortodonție. Elaborare metodică anul V, semestrul X. Chișinău, Centrul Editorial-Poligrafic Medicina, 2011.
6. Proffit W.R., Fields H.W., Sarver D.M. Contemporary Orthodontics. Fifth edition, Mosby Elsevier, 2013, 768 p.
7. Trifan V., Godoroja P. Ortodonție. Compendiu. Chișinău, Medicina, 2009. – 32 exemplare

B. Additional:

1. McDonald R., Avery D. Dentistry for the Child and Adolescent. 9th Ed. Mosby, 2011, 720p.
2. Бушан М. Г. Справочник по ортодонтии. Кишинев, 1990 г. – 51 exemplare
3. Персин Л.С. Ортодонтия. Диагностика и лечение зубочелюстно-лицевых аномалий и деформаций. Учебник. Издательство ГЭОТАР-Медиа, Москва, 2016, 640 с.
4. Хорошилкина Ф. Я. Ортодонтия. Москва, Медицина, 2010 г., 591 с.