COURSE UNIT DESCRIPTION

Course unit title	Code
Treatment planning of diseases of the stomatognathic system	

Lecturer(s)	Department(s)
Coordinating: doc. dr. Rūta Bendinskaitė, Others: prof. V. Pečiulienė, prof. dr., HP Alina Pūrienė, doc.dr. Saulius Drukteinis, doc. dr. Rasmutė Manelienė, lekt. dr. Estera Miliūnienė, lekt. Vaida Zaleckienė, lekt. Daiva Janavičienė, lekt. Jūratė Žekonienė, lekt. Giedrius. Krukonis, asist. dr. Arūnas Rimkevičius, lekt. Paulina Mikalauskienė, doc. dr. Vygandas Rutkūnas, lekt. Rolandas Pletkus, lekt. Vytenis Almonaitis, prof. dr. Tomas Linkevičius, lekt. Rita Vanagienė, asist. A. Gečiauskaitė, asist. dr. E. Vindašiūtė-Narbutė, doc. dr. Vilma Brukienė, lekt. Lina Džiaugytė, doc. dr. Linas Zaleckas, asist. dr. Ieva Gendvilienė, lekt. Dalius Matkevičius, doc. dr. Laura Linkevičienė, lekt. Dr. Rūta Almonaitienė, lekt. Eglė Nedzinskienė, lekt. Jurga Zubaitė-Maliuk, lekt. Modesta Domeikaitė, lekt. Greta Aidukaitė, lekt. Diana Kibickaja, lekt. Vilija Berlin	Vilnius University Faculty of Medicine Institute of Odontology

Cycle	Level of the course unit	Type of the course unit
Integrated studies	I/I	Compulsory

Mode of delivery	Period of delivery	Language of instruction
Face-to-face	5 Year, 9 semester	English

Prerequisites and corequisites	
Prerequisites: A student must have completed the following courses: human anatomy, human physiology, Human biology and fundamentals of genetics in dentistry, Fundamentals of microbiology. Oral ecosystem, public health and dental public health, Latin language and specialty language, Fundamentals of pathology. : Propedeutics of internal medicine and internal diseases, Fundamentals of radiology: general and dental radiology, Pharmacology. Clinical pharmacology and laboratory medicine. Fundamentals of diagnostics and treatment of oral and dental diseases V/VI, , Fundamentals of neurology, Prosthodontics III/IV, Oral surgery II/II, Research methodology I/III, Prosthodontics IV/IV, Orthodontics, Research methodology II/III, Fundamentals of maxillofacial surgery. Ear, nose and throat diseases. Oral pathology.	Corequisites (if any): It is recommended to study parallel: Research methodology III/III

Number of ECTS credits allocated to the course unit	Total student's workload	Contact hours	Self-study hours
25	670	384	286

Purpose of the course unit Programme competences to be developed
To develop the ability to independently perform the diagnosis and differential diagnosis of complicated and complex

tooth decay, complex endodontic diseases, create a treatment plan and perform treatment, perform complex endodontic retreatment procedures. To develop the skills of complex orthopedic treatment, to develop the skills to perform gingivectomy/gingivoplasty in the area of one tooth and immobilization of mobile teeth. To develop abilities to organize one's work and learning, choosing appropriate strategies for completing tasks, to develop abilities to work in a team. To develop the professionalism, independence and knowledge, skills and abilities of the dental student to understand orthodontic treatment tactics in various clinical situations. Develop the ability to independently ensure the oral health of infants, children and adolescents, diagnosis of oral diseases, effective treatment planning, preventive and curative procedures, work in an interdisciplinary team and seek professional development throughout the professional career. To develop the ability to independently extract teeth and tooth roots, treat complications of tooth extractions, inflammatory conditions of the jaws, differentiate the origin of facial pain		
Learning outcomes of the course unit	**Teaching and learning methods**	**Assessment methods**
Will acquire knowledge in the reasons of postoperative tooth sensitivity and will be competent to prevent it.	Collecting information from scientific sources, preparation and presentation of a review of scientific literature, lectures, practice	Testing (open-ended and closed-ended items), review of scientific literature, assessment of practical work Exam at the end of semester
Will acquire knowledge in factors determine the longevity of direct restorations, prevention of secondary caries, direct restoration wear, replacement indications, demonstrate understanding of economic aspect of direct cavity restoration		
Will be able to apply the acquired cariology knowledge while performing treatment of complicated and complex dental caries cases by restoring crowns defects by direct restoration, while protecting healthy tooth structure, restoring form and function		
Will be able to apply the acquired knowledge of endodontology in complex single-root and multi-root endodontic treatment of teeth; endodontic retreatment of single-rooted teeth, cusps and molars		
Will be able to perform supportive treatment of various marginal periodontal diseases and conditions		
Will be able to perform conservative treatment of mucositis		
Will be able to perform conservative treatment of peri-implantitis		
Will know and be able to determine the interdisciplinary relationship between periodontology, orthopaedics, endodontics and orthodontics		
Know how to comprehensively investigate, plan and perform orthopedic dentistry procedures.		
Know the indications and contraindications of the patient's prosthetics, the planning of rational prosthetics, the preparation of the mouth for various prostheses, their types and structural elements.		
Will be able to perform a complete examination of the patient, use diagnostic tools, evaluate dental prognosis, plan the construction of prostheses based on the principles of evidence-based dentistry as much as possible. Will be able to evaluate occlusal and temporomandibular factors in planning and carrying out treatment.		
Will be able to present initial and alternative treatment plans to the patient, perform preparatory treatment and consult with specialists in related fields.		
Will be able to perform short and long-term post-prosthetic care, to instruct patients, solve complications in a timely manner.	Seminar in small groups, analysis of clinical situations, self-study	Test
Will be able to advise a patient who will undergo orthodontic treatment: explain the orthodontic treatment plan, principles of operation of orthodontic appliances, possible alternatives, retention mode.	Seminars in small groups, analysis of clinical situations,	Performance of clinical situation

	practice with preclinical simulators	
Will be able to provide assistance in urgent orthodontic cases, in case of appliance deformations and fractures.	Seminars in small groups, analysis of clinical situations, self-study, preparation of presentation	Evaluation of presentation
Knows the etiology of orthodontic anomalies, differential diagnosis of orthodontic anomalies. Will be able: to take the diagnostics impressions, make diagnostics casts, adjust space mainteners and ortodontics retention appliances, removable orthodontic appliances, elainers, make a cephalometrical analysis, diagnostics test for diagnostics casts, to fix and remove the braces and archwires.	Seminars in small groups, analysis of clinical situations	Test
Knows the tactics and sequence of orthodontic treatment, when treating complex cases requiring orthodontic, orthopedic, periodontological, surgical treatment, aesthetic filling; will know the tactics of orthodontic treatment for patients with special needs, will know how to communicate and work in a team together with specialists from other fields	Seminars in small groups, analysis of clinical situations	Test
Will be able to differentiate pains in the facial area, prescribe the necessary tests to clarify the diagnosis, prescribe treatment or refer the patient to the consultation of an appropriate specialist		
Will be able to diagnose the most common diseases of the temporomandibular joint, plan the course of treatment in their case.		
Will be able to apply acquired surgical knowledge in uncomplicated extraction of teeth and their roots, treat the most common complications after tooth extraction and inflammatory conditions in both children and adults	Analysis of clinical situations, practice with patients, self-study	Presentation, practice diary Exam at the end of course
Will be able to apply problem-solving and communication skills, will demonstrate the ability to work in a team of specialists from various fields, ensuring the child's oral health.		
Will know the etiology of fear of dental treatment, the clinic, methods of controlling behavior during dental treatment.		
Will be able to diagnose and treat gingivitis and periodontitis in children.		
Knows the indications, contraindications and principles of general anesthesia in pediatric dentistry; will be able to recognize and evaluate critical health conditions of the child		

Topics	**Contact work hours**							**Time and tasks of self-study**	
	Lectures	Consultations	Seminars	Practice	Laboratory work	Practical training	**Total contact hours**	**Self-study**	**Tasks**
Diagnosis, differential diagnosis and treatment of complicated and complex dental caries cases				40			42	36	Reading additional scientific literature. To prepare and present a review of scientific literature on the relevant topic.
Diagnosis, differential diagnosis and treatment of complex endodontic cases. Endodontic retreatment of multirooted teeth and premolars			2	40			42	36	Reading additional scientific literature. To prepare and present a review of scientific literature on the relevant topic.

Interdisciplinary connection: period-endo. Interdisciplinary connection perio-orthodontics.			2	32			34	23	Reading additional scientific literature. To prepare and present a review of scientific literature on the relevant topic.
Interdisciplinary communication in perio-orthopedics. Supportive treatment of periodontal diseases			2	32			34	24	
Complex examination of a patient who needs orthopedic dental care: survey, examination, clinical and instrumental examination. Filling out the documentation. Photo documentation. Selection of primary and alternative treatment plans.			1	20			21	18	Reading additional scientific literature. To prepare and present a review of scientific literature on the relevant topic
Preparation of the mouth for prosthetics. Diagnostic prints, bite registers. Planning of temporary prosthetics. Fitting and corrections of temporary prostheses. Assessment of dental prognosis. Treatment plan corrections.			1	20			21	18	
Final impressions and bite registers. Quality communication with dental laboratory. Measurement, fitting, corrections of final prostheses. Delivery of fixed and removable prostheses. Digital technologies in orthopedic dentistry.			1	20			21	18	
Post-prosthetic care. Technical and biological complications of prosthetics and their solution, prosthetic repairs. Diagnosis and treatment of temporomandibular disorders. Communication with doctors of related specialties and health care personnel			1	20			21	18	
Etiology of orthodontic anomalies, genetic and non-specific, specific causes. The importance of milk teeth. Classification of orthodontic anomalies. Biological basis of orthodontic treatment.			4	10			14	8	Preparation of a literature review and preparation of a report on the causes of orthodontic anomalies, diagnosis, to describe the resulting orthodontic changes.
Treatment of sagittal, transverse, vertical occlusal anomalies, dental arches and individual tooth position anomalies depending on the age of the patient and the severity of the anomaly.			4	12			16	8	Prepare an orthodontic treatment plan for the given clinical situation, assessing the patient's special needs, risk factors, and alternatives
Complex treatment of orthodontic anomalies. Treatment of patients with periodontal disease.			4	10			14	8	To monitor the treatment of a complex clinical case or its stage
Fear of dental treatment				12			14	12	Reading additional literature, preparing a report on the fear of dental treatment
Sedation in pediatric dentistry. Dental treatment under general anesthesia in children			6	12			12	12	Prepare for classes on general anesthesia in children.

Gingivitis and periodontitis in children				12			14	12	Prepare for classes about gingivitis and periodontitis in children.
The most common temporomandibular joint diseases, treatment planning			1	12			13	9	Prepare for classes about temporomandibular joint diseases
Differential diagnosis of facial pain			1	12			13	9	To prepare presentation on the differential diagnosis of facial pain
Diagnosis of inflammatory conditions of the jaws, differential diagnosis, principles of treatment. Peculiarities in children's age			1	12			13	9	Prepare for classes on the peculiarities of inflammatory conditions of the jaws in children's age
Peculiarities of extraction of teeth and roots in children			1	12			13	8	Prepare for classes on the extraction of teeth and roots in children
Total			**32**	**352**			**384**	**286**	

Assessment strategy	Weight (%)	Assessment period	Assessment criteria
Accumulative assessment (the cumulative score must be maintained at no less than 5)			
Assessment of practical work during classes	100%	During semester	The evaluation criteria for the tasks performed during the exercises are specified in the appendices
Exam (the score must be at least 5 points)			
Evaluation of clinical situation	100%	During examination session	Comprehensively discloses knowledge by clearly interpreting the data presented in the description of the clinical situation and is able to perform a synthesis of existing data to determine the condition. Accurately determines the diagnosis of the given condition, presenting it in English and Latin languages (possible values: 0; 0.1; 0.2) Indicates the most appropriate treatment tactics and provides an alternative (if possible), analyzing the disadvantages and advantages, discusses in detail the need for additional clinical and laboratory tests, interdisciplinary treatment. Based on principles of evidence-based dentistry, critical thinking, literature as much as possible (possible values: 0; 0.1; 0.2; 0.3). Demonstrates a proper culture of linguistic expression, a logical flow of thoughts, able to participate in a discussion (possible values: 0; 0.1)
Final assessment			
Exam Accumulative score	50% 50%	During examination session	

Author	Year of publication	Title	No of periodical or vol. of publication	Publication place and publisher or Internet link
Required reading				
Ritter AV	2019	Sturdevant's art and science of operative dentistry		St. Louis, Missouri : Elsevie
Fejershov O., Kidd E.	2008	Dental caries: the Disease and Its Clinical Management. Second ed.		Wiley Blackwell
J. Lindhe, N. P. Lang, T. Karring.	2015	Clinical Periodontology and Implant Dentistry,6th edition,11,23,25,28,41,42,45,46,58 skyriai		Wiley-Blackwell

F. Schwarz,, J. Becker	2009	Peri-implant Infection - Etiology, Diagnosis and Treatment		Quintessence Pub, Chicago
Rosentiel S. F., Land M. F. Fujimoto J.	2015	Contemporary fixed prosthodontics.5. ed.	1-870	St. Louis : Mosby-Year Book
Jan Lindhe, Thorkild Karring, Niklaus P. Lang	2003	Clinical periodontology and implant dentistry. 4. ed.	352-366, 414-434, 705-731 731-744 p.	Copenhagen : Munksgaard
W.R.Proffit	2010	Contemporary ortodontics		Mosby
R. Nanda, S. Kupla	2010	Current therapy in Orthodontics		Mosby
e-žurnalas		Seminars in Orthodontics		Clinical Key duomenų bazė
Recommended reading				
Shwartz R.S.	2006	Fundamentals of Operative Dentistry: A Contemporary Approach		Quintessence
Newman, Michael G.	2015	Carranza's Clinical Periodontology, Twelfth Edition		https://www.clinicalkey.com/#!/browse/book/3-s2.0-C2012007634X
S.Renvert, J.-l.Giovanni	2012	Peri-implantitis		Quintessence international
Gunnar E. Carlsson, Tomas Magnusson	1999	Management of temporomandibular disorders in the general dental practice	9-123 p.	Chicago : Quintessence Pub.
Okeson, Jeffrey P	2003	Management of tempomandibular disorders and occlusion 5. ed.	147-365 p.	St. Louis: Mosby
F. McDonald and A. J. Ireland	2008	Diagnosis of the Orthodontic Patients.		Oxford university press
Th. Graber	2008	Orthodontics current principles and techniques		Mosby
P.S.Casamassimo, D.J.McTigue, H.W.Fields, Jr, A.J.Nowak	2013	Pediatric Dentistry. Infancy through adolescence		Elsevier Saunders
R. Welbury, M.S.Duggal, M.T.Hosey	2012	Paediatric dentistry, 4th ed.; p: 199-218; 54-71		Oxford University Press
G.Koch, S. Poulsen	2009	Pediatric dentistry-a clinical approach; p:32-43; 166-182		Wiley-Blackwell
C.Scully, R.A.Cawson	2005	Medical problems in dentistry.		Elsevier Churchill Livingstone
C. H. Splieth	2011	Revolutions in Pediatric Dentistry		Quintessence Publishing