COURSE UNIT DESCRIPTION

Course unit title	Code
Fundamentals of diagnostics and treatment of oral and dental diseases IV/VI	

Lecturer(s)	Department(s)
Coordinating: prof. V. Pečiulienė Others: prof., HP Alina Pūrienė, assoc. prof. Saulius Drukteinis, assoc. prof. Rasmutė Manelienė, assoc. prof. Rūta Bendinskaitė, assoc. prof. Estera Miliūnienė, assist.prof. Vaida Zaleckienė, assist. prof. Daiva Janavičienė, assist. prof. Jūratė Žekonienė, assist. prof. Giedrius Krukonis, assist.prof. Arūnas Rimkevičius, lect. dr. Deimantė Ivanauskaitė, lect. Paulina Mikalauskienė	Vilnius University Faculty of Medicine Institute of Odontology Centre of Clinical Odontology

Cycle	Level of the course unit	Type of the course unit
Integrated studies	IV/VI	Compulsory

Mode of delivery	Period of delivery	Language of instruction
Face-to-face	3 Year, 6 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 III/VI	**Corequisites (if any):** It is recommended to study parallel: Prosthodontics II/IV , Oral surgery I/II, Fundamentals of neurology

Number of ECTS credits allocated to the course unit	Total student's workload	Contact hours	Self-study hours
10	268	162	106

Purpose of the course unit Programme competences to be developed
Purpose of the course unit – to develop the ability to demonstrate a sound theoretical knowledge and understanding of the basic theories of colours, the principles of analysis and reproduction of the form of frontal teeth, the principles and techniques of direct aesthetic restorations, to develop the ability to choose them independently and apply in practice. To develop the ability to demonstrate a sound theoretical knowledge and understanding of etiopathogenesis, epidemiology and classification, diagnosis, differential diagnosis, treatment and follow-up of traumatic dental injuries and its complications, the peculiarity of apexogenesis and apexification procedures, principles of classification, differentiation and treatment of root resorptions, principles and algorithms of the management of emergencies of dental trauma and to develop the ability to apply them in practice. To develop the ability to demonstrate a sound theoretical knowledge and understanding of principles of CBCT in diagnosis and differentiation of traumatic dental injuries and its complications. To develop the ability to demonstrate a sound theoretical knowledge and understanding of modifying

factors and risk assessment of periodontal disease progression, to diagnose and treat chronic and aggressive periodontitis, acute periodontal diseases and conditions, to use a power driven instruments for plaque and calculus removal. To develop the ability to organize self-study, choosing right strategy to perform the tasks.		
Learning outcomes of the course unit	**Teaching and learning methods**	**Assessment methods**
Will acquire knowledge in the basic theories of teeth colours, the principles of analysis and reproduction of the form of frontal teeth, the principles of aesthetic restoration to meet patients' expectations.	Collecting information from scientific sources, preparation and presentation of essay, lectures, practice	Testing (open-ended and closed-ended items), essay, assessment of practical work Exam at the end of semester
Will acquire knowledge in anterior teeth direct aesthetic restoration techniques and their characteristics, will be able to apply them in clinical practice.		
Will acquire knowledge in etiopathogenesis, epidemiology and classification of traumatic dental injuries. Will acquire knowledge and understanding in the peculiarity of apexogenesis and apexification procedures, will be able to apply them in clinical practice.		
Will acquire knowledge in principles of diagnosis, differential diagnosis, treatment and follow-up of traumatic dental injuries.		
Will be able to manage the emergencies of dental trauma, to inform the patients about the care of traumatised teeth.		
Will acquire knowledge in the principles of diagnosis and treatment of dental trauma complications, will be able to chose and apply their prophylactic methods. Will acquire knowledge in principles of classification, differentiation and treatment of root resorptions.		
Will acquire knowledge in principles of using CBCT in diagnosis and differentiation of traumatic dental injuries and its complications.		
Will be familiar with modifying factors of periodontal diseases, risk assessment of periodontal disease progression.		
Will be competent to diagnosing and treating of chronic and aggressive periodontitis, acute periodontal diseases and conditions.		
Will be competent to use a power driven instruments for plaque and calculus removal.		

Topics	**Contact work hours**							**Time and tasks of self-study**	
	Lectures	Consultations	Seminars	Practice	Laboratory work	Practical training	**Total contact hours**	**Self-study**	**Tasks**
Etiopathogenesis, epidemiology and classification of traumatic dental injuries. Diagnostic principles and general principles of treatment palnning. Splinting of the traumatized teeth: principles and methods.	2			10			**12**		
Uncomplicated and complicated crown fractures. Diagnosis, emergency, treatment and follow-up. Apexogenesis, apexofication and principles of regeneration.	4		2	16			**22**	**14**	To prepare and present an essay on the clinical steps of apexogenesis and apexification procedures, using MTA cement
Luxation injuries. Diagnosis, emergency, treatment, follow-up and prognosis.	4		2	10			**16**		
Late complications of traumatic dental	2			10			**12**	**8**	To prepare and present an essay on

injuries. Root resorbtions: classification, diagnosis and treatment principles									most often occurring complications of dental trauma, management and prevention
CBCT in diagnosis and differentiation of traumatic dental injuries and its complications			4	6			**10**	**10**	To prepare and present an essay on advantages and disadvantages of CBCT. Description of CBCT
Non carious dental diseases	2		2	10			**14**	**8**	To prepare and present an essay on non carious diseases
Postoperative sensitivity	2			10			**12**	**8**	To prepare and present an essay on postoperative sensitivity: etiology, clinics, prevention
Longevity of direct restorations	2						**2**	**8**	To prepare and present an essay on factors influencing longevity of restorations
Acute periodontal status: etiology, clinics, fundaments of treatment.	2		2	10			**14**	**10**	Analyze the scientific literature on anti-bacterial treatment of periodontal diseases: indications of use, duration, medications, efficacy.
Non surgical periodontal treatment.	2			10			**12**	**10**	To prepare and present essay on conservative periodontitis treatment
Surgical periodontal treatment: indications, methods, tipes of operations, instruments, postoperative care.	2			10			**12**	**10**	Examine in atlas the techniques of flap operations. Prepare and present essay about sutures technics in periosurgery. To analyze the peculiarities of postoperative periodontological care after different periosurgery interventions.
Guided tissue regeneration.	2			10			**12**	**10**	Analyze scientific literature on materials used for guided tissue regeneration and compare their effectiveness
Crown lengthening: indications, methods, postoperative care. Treatment of furcations and pronosis	2			10			**12**	**10**	To study surgical treatment methods in textbooks
Total	**28**		**12**	**122**			**162**	**106**	

Assessment strategy	**Weight (%)**	**Assessment period**	**Assessment criteria**
Accumulative assessment **(all components of the cumulative score must be maintained at no less than 5)** **Obligatory attendance of seminars and practice**			
Test	60%	During semester	The test consists of open-ended questions or a clinical situation or definition. The test is carried out during the practice, at least 1 week after the lecture corresponding to the test questions. Students are introduced to the subject of written tests and lectures in advance. The overall test score is written by summing up the points of the individual questions and dividing it by the number of questions. The minimum passing score for each test is 5. Failed tests are allowed to be retaken once during the semester. The total score of the test is written at the end of the semester, summing up the average of all the test scores performed and dividing it by the number.
Essay	10%		- clarity of ideas, quality of arguments (2 points); - structure of essay (2 points); - style and quality of scientific language (2 points); - quality (valid and reasonable) of conclusions (2 points). - visual quality of material presented (2 points). An essay is prepared on given topic. Teacher assesses an essay and it is presented in the cyberspace. The final score is written at the end of the semester as an average score of all essays prepared.
Assessment of practical work	30%		Assessment methods and minimal requirements of practical work please find in the attachment
Exam			

(both components must be at least 5 points)			
Test	100%	During examination session	Closed-ended and open - ended questions. 50% type I, one correct answer from 4, 40% type II, 2-3 correct answers from 5, 10% type III clinical situation or description. Every answer is evaluated 0 or 10 points. Total points for test: the sum of all points divided from number of questions. Examination is considered to be passed if correct answer is given to 50%. and more questions. 91-100 percent - 10 points (excellent); 81-90 percent - 9 points (l. Well); 71-80 percent - 8 points (good); 61-70 percent - 7 points (average); 56-60 percent - 6 points (satisfactory); 50-55 percent - 5 points (weak); 41-49 percent - 4 points (unsatisfactory); 31-40 percent - 3 points (unsatisfactory); 21-30 percent - 2 points (unsatisfactory); 11-20 percent - 1 point (unsatisfactory); 0-10% - 0 points (not rated).
Final assessment			
Exam	50%	During examination session	The score of the exam consists of the theoretical part of the exam.
Accumulative score	50%		Accumulative score: the average of sum of all scores received for all tests, essays and assessments of practical work during 2 semesters

Author	**Year of publication**	**Title**	**No of periodical or vol. of publication**	**Publication place and publisher or Internet link**
Required reading				
S. G. Kim1 , M. Malek2 , A. Sigurdsson2 , L. M. Lin2 & B. Kahler	2018	Regenerative endodontics: a comprehensive review	51, 1367–1388	International Endodontic Journal,
Shanon Patel, BDS, MSc, MClinDent,* Domenico Ricucci, MD, DDS,† Conor Durak, BDSc, MFDS RCS (Eng),* and Franklin Tay, BDSc (Hons), PhD‡	2010	Internal Root Resorption: A Review	36:1107–1121	J Endod
Anibal Diogenes, DDS, MS, PhD*, Nikita B. Ruparel, MS, DDS, PhD	2017	Regenerative Endodontic Procedures: Clinical Outcomes	61; 111–125	Dent Clin N Am
S. Patel1,2 , F. Foschi1, R. Condon1, T. Pimentel1 & B. Bhuva1	2018	External cervical resorption: part 2 – management	51, 1224–1238	International Endodontic Journal
Shahrokh Shabahang	2013	Treatment Options: Apexogenesis and Apexification	39:S26–S29	J Endod
Leena Palomo, DDS, MSDa, J.Martin Palomo, DDS, MSDb,c	2009	Cone Beam CT for Diagnosis and Treatment Planning inTrauma Cases	53; 717–727	Dent Clin N Am
Leif K. Bakland, DDS	2009	RevisitingTraumatic Pulpal Exposure: Materials, Management, Principles, andTechniques	53; 661–673	Dent Clin N Am
David E. Jaramillo, DDS*, Leif K. Bakland, DDS	2009	Trauma Kits for the Dental Office	53; 751–760	Dent Clin N Am

Husam Elias, MD, DMDa,*, Dale A. Baur, DDS, MD	2009	Management of Trauma to Supporting Dental Structures	53; 675–689	Dent Clin N Am
Linda Gibson Levin	2013	Pulp and Periradicular Testing	39:S13–S19	J Endod
G. Debelian, M. Trope	2016	The use of premixed bioceramic materials in endodontics,	Vol.30, 70-80	Giornale Italiano di Endodontica
Fejershov O., Kidd E.	2008	Dental caries: the Disease and Its Clinical Management. Second ed.		Wiley Blackwell
Recommended literature				
Andreasen JO, Andreasen FM, Andersson L	2005	Textbook and Colour Atlas of Traumatic Injuries to the Teeth		Blackwell Munksgaard
Shwartz R.S.	2006	Fundamentals of Operative Dentistry: A Contemporary Approach		Quintessence
SEDENTEXCT project	2011	Radiation Protection No 172: Cone Beam CT for Dental and Maxillofacial Radiology. Evidence based guidelines		http://www.sedentexct.eu/content/guidelines-cbct-dental-and-maxillofacial-radiology
J. Lindhe, N. P. Lang, T. Karring.	2015	Clinical Periodontology and Implant Dentistry, 6th edition, 14,15,20,21,22, 24,31,60 skyriai		Wiley- Blackwell
Newman, Michael G.	2015	Carranza's Clinical Periodontology, Twelfth Edition		https://www.clinicalkey.com/#!/browse/book/3-s2.0-C2012007634X