

	Syllabus for academic year: 2020/2021													
		T	ainin	g cyc	le: Maj	jor c	rien	ted						
			De	escripti	on of th	e cou	irse							
Module/Course		R	estora	ative	dentist	ry w	/ith		G	roup c	of deta	iled ed	ucatior	1
			ndodo	ontics	(Cario	logy	part	1)	re	results				
					•	0.	•	•	G	roup c	ode	Group	name	
									F			VI - C	inical	
												scien	ces	
Faculty		Fa	culty c	of Dent	istry									
Major		De	entistry	y										
Unit realizing the subject		Co	onserva	ative D	entistry	with	Endo	dontic	s Depa	artmei	nt, Me	dical U	niversi	ty
		of	Wrocl	aw										
Specialties		Re	estora	ative	dentist	ry w	ith (endo	donti	cs				
Level of studies		Uı	niform	magis	ter stud	ies X	*							
			^t degre											
		2 ⁿ	d degre	ee stud	\exists									
		3 rd degree studies □												
		pc	postgraduate studies											
Form of studies		Х	X full-time □ part-time											
Year of studies			III				Seme	ester	er X Winter					
			X Summer											
Type of course		X obligatory												
			☐ limited choice											
			☐ free choice / elective											
Course		Х	X major □ basic											
Language of instruction			□ Polish X English □ other											
* mark 🗆 with an X														
					ber of h									
				Form	of educ	ation					_		_	
								int	Jo.	()]-	λιο			
			(C)	linica		Û		Patie	agisto	ırse (F	oligato	VP)	own	
Unit teaching the course			ses (A	not c	(CC)	ses (L	ated)	s with	m – sa	te Cor	ion ok	tice (ent's	
offic teaching the course	$\widehat{}$	(SE)	n clas	ses –	ses	/ Clas	Simul (CSC	lasse	Classe CM)	gnag	ducati	Prac	(Stud	(EL)
	Lectures (L)	Seminars (SE)	Auditorium classes (AC)	Major Classes – not clinical (MC)	Clinical Classes (CC)	Laboratory Classes (LC)	Classes in Simulated	Practical Classes with Patient (PCP)	Specialist Classes – magister studies (SCM)	Foreign language Course (FLC)	Physical Education obligatory (PE)	Vocational Practice (VP)	Self-Study (Student's own work)	E-learning (EL)
	Lectu	Semi	Audi	Majc (MC)	Clinic	Labo	Class	Pract (PCP)	Spec studi	Fore	Physi (PE)	Voca	Self-St work)	E-lea
Winter Semester	I	I	l .	I		l					<u> </u>			
Direct (contact)					37,5									
education														

Online learning		30								
(synchronous)										
Distance learning					37,5					
(asynchronous)										
Summer Semester										
Direct (contact)	15	18			75					
education										
Online learning										
(synchronous)										
Online learning										
(asynchronous)										
TOTAL per year:	TOTAL per year:									
Direct (contact)	15	18			112,5					
education										
Online learning		30								
(synchronous)										
Online learning					37,5					
(asynchronous)										
Educational chicatives (may Citams)										

Educational objectives (max. 6 items)

- G1. To familiarize students with the basic and specialized knowledge in the diagnosis and treatment of oral cavity diseases in adults.
- G2. Preparing students to perform individual caries risk assessment, establishing the treatment plan and recommendations for the patient.
- G3. Preparing students to perform restorative treatment of carious and non-carious hard dental tissues lesions as well as endodontic treatment.
- G4. Familiarize students with the dental treatment implications in a patient with the systemic disease.
- G5. Preparing students for active participation in health promotion.

Education result matrix for module/course in relation to verification methods of the intended education result and the type of class

Number of course education result	Number of major education result	Student who completes the module/course knows/is able to	Methods of verification of intended education results (forming and summarising)	Form of didactic class **enter the abbreviation
W01	F.W.3	To define the communication way with a patient and motivation	Oral response (F), test (P)	
W02	F.W.3	To explain the principles of preventive-treatment procedures in oral diseases	Oral response (F), test (P)	
W03	F.W.7	To define the management principles in diseases of hard dental tissues of carious and non-carious origin	Oral response (F), test (P)	



W04	F.W.7	To describe the principles of	Oral response (F),
		minimally invasive treatment	test (P)
W05	F.W.9	Knows the indications for	Oral response (F),
		cariologic re-treatment	test (P)
W06	F.W.13	To define the indications and	Oral response (F),
		contraindications for aesthetic	test (P)
		dentistry procedures	
W07	F.W. 13	To perform aesthetic	Oral response (F),
		reconstruction of hard dental tissues	test (P)
U01	F.U1.	To gather medical and dental	Clinical assessment
		history from the patient	observation(F)
U02	F.U2.	To perform clinical examination	Clinical assessment
		and interpret the data	observation(F)
U03	F.U3	To be able explain the patient's	Clinical assessment
		ailments to set the optimal	observation(F)
		method of treatment confirmed	
		by a conscious consent of a	
		patient and give the prognosis of	
		the treatment	
U04	F.U7.	To be able to set indications and	Clinical assessment
		contraindications for the given	observation(F)
U05	F.U8.	dental procedure To present the disease risk	Clinical assessment
003	1.00.	assessment and select the	observation(F)
		optimal methods of oral disease	
		prevention	
U06	F.U13.	To use and perform the current	Clinical assessment
		documentation of the patient,	observation(F)
		referral for investigations or	
		specialist for medical and dental	
		treatment	
K01	K 01		Summarizing
		to cooperate in the group of	methods:
		professionals, in the environment	- constant evaluation by
		multicultural and multinational	teacher (surveying)
		maticultural and multinational	Shaping methods:
			- observation of
			student's work

К02	К02	To be able to creates rules of the professional comradeship and the cooperation with representatives of other health care professionals	- discussion during classes - opinions of colleagues Summarizing methods: - constant evaluation by teacher (surveying) Shaping methods: - observation of student's work - discussion during classes - opinions of colleagues
К03	К03	To be active in oral health promotion	Summarizing methods: - constant evaluation by teacher (surveying) Shaping methods: - observation of student's work - discussion during classes - opinions of colleagues

^{**} L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning.

Please mark on scale 1-5 how the above effects place your classes in the following categories: communication of knowledge, skills or forming attitudes:

Knowledge: 5

Skills: 5

Social competences: 4

Student's amount of work (balance of ECTS points)

Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)			
	Winter	Summer	Total (h)	
1. Contact hours:	37,5	37,5	75	
2. Online learning hours (e-learning):	67,5	70,5	138	
3. Student's own work (self-study):	30	30	60	
Total student's workload	135	133	268	
ECTS points for module/course	4	4	8	
Comments				

Content of classes (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)

Lectures

Semester 6

No.	Lecture topic
1.	Developmental teeth abnormalities (number, size, shape, tissues structure, color, ethiology, pathomechanism, clinical and radiological symptoms and signs, differentiation, therapeutic procedures) part 1
2.	Developmental teeth abnormalities (number, size, shape, tissues structure, color, ethiology, pathomechanism, clinical and radiological symptoms and signs, differentiation, therapeutic procedures) part 2
3.	Teeth discoloration (staining),- etiology, mechanism, clinical signs and symptoms, therapeutic procedures, prevention)
4.	 1.Patient motivation for pro healthy actions. 2. Individual - at home and professional caries preventive procedures. 3. The role of fluoride in oral health promotion; modern concepts of fluoride cariostatic actions (2 hours).
5.	Dentin hypersensitivity – ethiopathomechanism, clinical symptoms, treatment, efficacy.
6.	Oral health promotion – models o health promotion (health care, health education, prevention) the WHO basic methods of oral health surveys, oral health indices - DMFT, SiC, CPI and others, global goals of oral health proposed by the WHO/FDI; global data of the WHO, regional epidemiological data, comparison of caries epidemiological situation between countries.
7.	Modern concepts and strategies of dental caries prevention. Caries risk assessment and prognosis of carious lesions development. Practical use of Cariogram - the interactive computer programme for evaluation of caries risk assessment and individually designed preventive measures.

Seminars

Semester 5

	mpetence of scheduled material will be verified in the form of test or essay and during the classes.
No.	Seminar topic
1.	1.Oral clinical examination – teeth (caries, developmental and acquired abnormalities, non-
	carious dental defects), periodontal tissues (healthy and pathological changes of periodontal
	tissues), oral mucosa, salivary glands.
	2. Investigations. Indices of dental caries, hygiene, dental plaque and periodontal tissues
	condition.
	3. Dental plaque, calculus – detection, removal.
	4.Oral hygiene instruction, dietetic instruction
	5.Review of patient form
2.	1.Classification of carious lesions according to Black and modern classifications
	2. Phases of cavity preparation according to Black and contemporary approach to particular
	stages of preparation
	3.Clinical problems: repair or replacement of a restoration, secondary caries, fracture of the
	tooth or a restoration, post treatment hypersensitivity
3.	1 Rules of cavity preparations for adhesive and non-adhesive restoration
	2. Methods of filing the cavity with various restorative materials (amalgam, GI composites)
	3. Layering technique of restoration- types, advantages and disadvantages
	4.Preventive restorative treatment (PRR A and B), slot preparation, tunnel preparation,
	sandwich technique

	5.Instruments used in restorative treatment: diagnostic instruments, instrument for						
	preparation the tooth, placement and finishing the restoration, isolation of operative area,						
	rubberdam , injections, matrices						
4.	1.Restorative dental materials –phosphate cements, polycarboxylate cements, conventional and						
	light-cured glass ionomer cements, cermets, compomers, composites (standard, packable and						
	flow), giomers, amalgams; fissures sealants (composites and glass ionomers) composition,						
	properties, advantages and disadvantages, indications						
	2. Modern adhesive systems (IV-VII generation).						
	3. Types of light-curing units and polymerization techniques.						
5.	1. Quality and quantity methods of early carious lesion detection.						
	2. Diagnosis of early carious lesion, making decision on invasive or non-invasive treatment.						
	3. Diagnosis of caries in regard of localization the lesion						
6.	1. Natural history of a caries and its determinants						
	2.Clinical and microscopic appearance of a caries						
	3. Caries of a crown and root						
7.	1. Non-conventional methods of cavity preparations						
	CMCR- chemomechanical caries removal, ART- atraumatic restorative treatment, air abrasion						
	technique, kinetic cavity preparation -KCP, sonic system, laser ozone therapy						
8.	Non-carious defects of hard tissue, definition of abrasion, erosion, abfraction						
	ethiopathomechanism, prevalence, clinical appearance, treatment and prevention						
9.	1.Modern concepts of caries prevention. Prevention and control of caries progression. the						
	concept of preventive treatment (non-invasive)						
	Preventive and therapeutic treatment in elderly patients						
	3. Root caries development, clinical appearance, therapeutic and preventive treatment						
10.	1.Esthetic reconstruction of lost hard tissue (cavity preparation, circumstances for optimal						
	adhesion, selection of technique and material, finishing of the restoration						
	2.Composite veeners.						
	3.Reinforcment the retention of the restorations.						
	4.Dicoloration of the teeth: etiology and treatment						
	5. Bleaching of vital and non vital teeth(types techniques)						
	6.Problems and complication of bleaching vital and non –vital teeth						

Semester 6

No.	Seminar topic
1.	1.Morphology of the teeth in aspect of endodontic treatment. Classification of the root canal
	configurations
	2.Endodontium- structure, function, therapeutic implications.
	3. Etiology and pathophysiology of the pulp and periapical tissues diseases.
2.	Pulp diseases - etiology, patomechanism, classification - reversible and irreversible pulpopathies,
	symptoms, signs, differential diagnosis, diagnostic methods.
3.	Treatment of reversible pulpitis – methods of vital pulp treatment, indications and
	contraindications, prognosis, sequels; odontropic agents (calcium hydroxide, MTA, Biodentine,
	adhesive systems), healing of the pulp, treatment procedures, prognosis, complications.
4.	Treatment of irreversible pulpitis.
	Root canal treatment stages (endodontic access, working length.
5.	Chemo-mechanical preparation of the root canals.
6.	Obturation of the root canals: techniques , materials, effectiveness.

Practical classes

Semester 5

A. Distant learning classes- rules

- Student will receive in advance by mail clinical case to prepare
- Prepared clinical case student should send back to his tutor before scheduled date of class.
- Classes will be held on line with attributed tutor according to the schedule. During the classes clinical cases are discussed
- In case of missing the classes due to important circumstances (Dean's day, Rector "s day) theory must be completed in other fixed date

B. clinical classes in blocks - rules

- -Clinical classes will begin with repetition of theory gained on 2nd year which will be held on first clinical class. Passing the repetition with positive note is the mandatory condition to start practical classes with patient Scope:
 - 1. Classification of carious lesions according to Black
 - 2. Types of dental burs and their application, types of matrices, bands
 - 3. Finishing the restoration (methods, tools)
 - 4. Materials used in conservative dentistry (temporary, for bases, final)
 - 5. Methods of cavity preparation and restoration with composite
 - 6. Methods of cavity preparation an restoration with glass-ionomer
 - 7. Non-carious dental defects
- Students will work in pairs
- Students have to bring their textbooks and phantom model used on 2 second year
- In case of lack of patient variant B is accomplished

Variant B (without the patient)

Preparation of clinical case given by tutor (theoretically with the textbook or practically using the phantom model)

Semester 6

- 1. Introduction to clinical classes. Review of the regulation and credit requirements. Conservative dental treatment of the patients.
- 2. Repetition-of the knowledge acquired during the third and fourth semester.
- Clinical examination of the patient. Medical and dental history, extraoral and intraoral examination (students examine themselves). Dental health forms.
- 3. Developmental teeth abnormalities regarding shape, number, position, morphology- etiology, diagnostic, differentiation, management .Conservative dental treatment of the patients Test
- 4. Developmental teeth abnormalities regarding structure of the hard tissue -etiology, diagnostic, differentiation, management. Test. Clinical examination of the patient.
- 5. Conservative dental treatment of the patients.
- 6. Conservative dental treatment of the patients.
- 7. Teeth discoloration (staining)- etiology, mechanism, clinical signs and symptoms, therapeutic procedures, prevention). Test. Conservative dental treatment of the patients.
- 8. Conservative dental treatment of the patients.
- 9. Dentin hypersensitivity ethiopathomechanism, clinical symptoms, treatment, efficacy. Test. Conservative dental treatment of the patients.
- 10. Oral health promotion models o health promotion (health care, health education, prevention) the WHO basic methods of oral health surveys, oral health indices DMFT, SiC, CPI and others, global goals of oral health proposed by the WHO/FDI; global data of the WHO, regional epidemiological data, comparison of caries epidemiological situation between countries Test.

Conservative dental treatment of the patients.

11. Modern concepts and strategies of dental caries prevention. Caries risk assessment and prognosis of carious lesions development. Practical use of Cariogram- the interactive computer program for evaluation of caries risk assessment and individually designed preventive measures. Conservative dental treatment of the patients.

- 12. FINAL TEST for completing the course. Conservative dental treatment of the patients.
- 13. Conservative dental treatment of the patients.
- 14. Conservative dental treatment of the patients.
- 15. Make up of backlogs. Credit of subject (winter semester).

Other

Basic literature (list according to importance, no more than 3 items)

- 1. Kidd E.A.M., Joyston-Bechal S.: Essentials of dental caries. 3rd ed. Oxford University Press, Oxford 2005.
- 2. Sturdevant" Art& Science of Operative Dentistry 5th edition Roberson T.M., Heymann H.O., Swift E.J., Mosby St. Louis 2006
- 3. Kidd E.A.M., Smith B.G.N., Watson T.F.: Pickard's manual of operative dentistry. 8th ed. (repr.). Oxford University Press, Oxford 2011

Additional literature and other materials (no more than 3 items)

- 1. Tronstadt L.: Clinical endodontics: a textbook. 2nd ed. Georg Thieme Verlag, Stuttgart 2009
- 2. Torabinejad M., Walton R. E., "Endodontics, principles and practice" 5th edition, Saunders Elsevier 2009
- 3. Powers J.M., Wataha J.C.: Dental Materials. Properties and manipulation. Elsevier, 10th ed., 2013

Didactic resources requirements (e.g. laboratory, multimedia projector, other...) dental camera, multimedia projector, computer, models

Preliminary conditions (minimum requirements to be met by the student before starting the module/course) Student is admitted to 3rd year classes after successful completion of the final preclinical exam summarizing knowledge of the subject from the 2 rd year.

Conditions to receive credit for the course (specify the form and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be med by the student to pass it and criteria for specific grades)

Clinical classes

- 1.Student have to send to his tutor prepared clinical case up to established date
- 2. Theoretical competency should be credited with positive mark with the tutor
- 3. Practical skills should be positively credited by the tutor
- 4. Scheduled clinical procedures have to be performed

A. Distant learning classes-rules

- Student will receive in advance by mail clinical case to prepare
- Prepared clinical case student should send back to his tutor before scheduled date of class.
- Classes will be held on line with attributed tutor according to the schedule. During the classes clinical cases are discussed
- In case of missing the classes due to important circumstances (Dean"s day , Rector "s day) theory must be completed in other fixed date

B. clinical classes in blocks - rules

-Clinical classes will begin with repetition of theory gained on 2nd year which will be held on first clinical class. Passing the repetition with positive note is the mandatory condition to start practical classes with patient Scope:

- 8. Classification of carious lesions according to Black
- 9. Types of dental burs and their application, types of matrices, bands
- 10. Finishing the restoration (methods, tools)
- 11. Materials used in conservative dentistry (temporary, for bases, final)
- 12. Methods of cavity preparation and restoration with composite
- 13. Methods of cavity preparation an restoration with glass-ionomer
- 14. Non-carious dental defects
- Students will work in pairs
- Students have to bring their textbooks and phantom model used on 2 second year

- In case of lack of patient variant B is accomplished

Variant B (without the patient)

Preparation of clinical case given by tutor (theoretically with the textbook or practically using the phantom model)

Seminars

- 1. The presence on seminars is mandatory
- 2. Competency of scheduled topic is verified after each seminar

Forms of completing the course:

Credit form: theoretical competency and practical skills.

Credit Conditions:

Completing the clinical procedures (both semesters of 3rd year study):

- dental examination and filling the medical chart 5x and at each new patient
- hygienic & dietetic instruction for each new patient
- caries risk assessment 3 times
- 10 cavities preparations and fillings:

Gaining the positive notes from theoretical part (seminars and classes)

Positive note from the final test

Final test will be held on the end of summer semester and will concern material from winter and summer semester classes as well as seminars and lectures

In case of failing to pass all required goals and objectives of the course - student will

receive "conditional credit" with a deadline to fulfill all areas ordinated by Dean.

Final exam

Final exam of cariology will be held in summer session in the form of test and will cover material from both semesters, seminars and lectures

Grade:	Criteria (only for courses/modules ending with an examination)
Very Good	achievement of learning outcomes covering all relevant aspects
(5.0)	
Good Plus	achievement of learning outcomes covering all relevant aspects with some
(4.5)	errors or inaccuracies
Good	achievement of intended learning outcomes, with omitting some of the
(4.0)	less important aspects
Satisfactory Plus	achievement of intended learning outcomes, with omitting some
(3.5)	important aspects or significant inaccuracies
Satisfactory	achievement of intended learning outcomes, with omitting some
(3.0)	important aspects or serious inaccuracies
	Criteria (only for courses/modules ending with e credit)
Credit	

Grade:	Criteria (examination evaluation criteria)
Very Good	achievement of learning outcomes covering all relevant aspects
(5.0)	



Good Plus	achievement of learning outcomes covering all relevant aspects with some
(4.5)	errors or inaccuracies
Good	achievement of intended learning outcomes, with omitting some of the
(4.0)	less important aspects
Satisfactory Plus	achievement of intended learning outcomes, with omitting some
(3.5)	important aspects or significant inaccuracies
Satisfactory	achievement of intended learning outcomes, with omitting some
(3.0)	important aspects or serious inaccuracies
Unit realizing the subject	Dept. Of Conservative Dentistry with Endodontics, Medical University of Wroclaw
Unit address	ul. Krakowska 26, 50-425 Wrocław
Telephone	Tel.: (71) 784 0361, fax (71)784 03621
E-Mail	stomzach@umed.wroc.pl

Person responsible for	Prof. Katarzyna Skośkiewicz-Malinowska, DDS,PhD	
module		
Coordinator	Prof. Katarzyna Skośkiewicz-Malinowska, DDS,PhD	
Telephone	Tel.: (71) 784 0361	
E-Mail	katarzyna.skoskiewicz-malinowska@umed.wroc.pl	

List of persons conducting specific classes					
Full name	Degree/scientific or professional title	Discipline	Performed profession	Form of classes	
Urszula Kaczmarek	Prof., DDS, PhD	Dentistry	dentist	lectures, seminars	
J. Kobierska-Brzoza	DDS, PhD	Dentistry	dentist	seminars, classes	
D. Piesiak - Pańczyszyn	DDS	Dentistry	dentist	seminars, classes	
A. Czajczynska- Waszkiewicz	DDS	Dentistry	dentist	seminars, classes	
M. Kowalczyk -Zając	DDS, PhD	Dentistry	dentist	classes	
M. Gutbier	DDS	Dentistry	dentist	classes	
N. Jawor	DDS	Dentistry	dentist	classes	
A. Urbańska	DDS	Dentistry	dentist	classes	
M. Berdzik-Janecka	DDS	Dentistry	dentist	seminar	



Date of Syllabus development	Syllabus developed by
16.09.2020	Agnieszka Czajczyńska-Waszkiewicz, DDS
	Signature of Head of teaching unit
	Prof. Katarzyna Skośkiewicz-Malinowska, DDS,PhD
Signature of Faculty Dean	