

	Syllabus for academic year: 2020/2021													
			Train	ing c	ycle:	Majo	r or	iente	d					
				Descri	ption	of the	cours	se						
Module/Course		R	estor	ative	denti	istry v	with	1	Gr	oup of	detailed	educat	ion res	ults
		eı	ndodo	ontics	6				Gr	oup co	ode F	Group name		
												VI - Cli	nical	
												scienc	es	
Faculty			culty o	of Dan	tictry									
Major			entistr		cisci y									
Unit realizing the subject				•	entist	rv with	n End	lodont	ics Dep	artme	nt, Medic	cal Univ	ersity	of
			roclaw			.,			.00 2 00		,		,	
Specialties		R	estora	ative	denti	istry v	with	endo	donti	ics				
Level of studies						udies X								
		<b>1</b> <sup>s</sup>	t degre	e stuc	lies 🗆									
		2 <sup>n</sup>	d degr	ee stu	dies 🗆									
		3 <sup>r</sup>	3 <sup>rd</sup> degree studies □											
		ро	postgraduate studies											
Form of studies		Х	<b>X</b> full-time □ part-time											
Year of studies		IV	,					Seme	ster	ΧW	/inter			
			<b>X</b> Summer											
Type of course		Х	<b>X</b> obligatory											
			☐ limited choice											
			☐ free choice / elective											
Course		X	<b>X</b> major □ basic											
Language of instruction			□ Polish <b>X</b> English □ other											
* mark □ with an X														
						of hou								
	1			Fo	rm of e	educat	ion		I		I			I
								ent	ter	(FLC)	:ory			
Unit teaching the course			AC)	not clinical		(C)		h Pati	nagist	urse (	bligat	(VP)	own	
			sses (	- not	(00)	sses (	lated	es wit	es – r	ge Cc	tion o	ctice	dent's	
Ü	(1)	(SE)	m cla	isses -	lasses	ry Cla	Simu	Classe	Class CM)	angna	duca	al Pra	y (Stu	g (EL)
	Lectures (L)	Seminars	Auditorium classes (AC)	Major Classes – r (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)
	Lec	Sen	Auc	Ma	Clin	Lab	Class	Pra (PC	Spe	For	Phy (PE	Voo	Self	E-le
Winter Semester														
Direct (contact) education					30									
Online learning		20												
(synchronous)														

Distance learning				30					
(asynchronous)									
Summer Semester	•								
Direct (contact) education				60					
Online learning (synchronous)	10								
Online learning (asynchronous)									
TOTAL per year:									
Direct (contact) education				90					
Online learning (synchronous)	10	20		30					
Online learning (asynchronous)									

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 explain the principles of preventive-treatment procedures in oral diseases	Oral response (F), test (P	L,CC
W02	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)	CC
W03	F.W.7	To describe the principles of minimally invasive treatment	Oral response (F), test (P)	L, CC



W04	F.W.7	To define and explain the principles in management of pulp diseases	Oral response (F), test (P)	SE, CC
W05	F.W.7	To describe and understand the indications to re-treatment in cariologic and endodontic cases	Oral response (F), test (P)	SE, CC
W06	F.W.13	To define the indications and contraindications for aesthetic dentistry procedures	Oral response (F), test (P)	CC
W07	F.W.22	To describe and understand the relationships between oral health status and systemic diseases	Oral response (F), test (P)	L, SE, CC
U01	F.U.1	To gather medical and dental history from the patient	Clinical assessment observation (F)	СС
U02	F.U.2	To perform clinical examination and interpret the data	Clinical assessment observation (F)	СС
U03	F.U.3	To be able explain the patient's ailments to set the optimal method of treatment confirmed by a conscious consent of a patient and give the prognosis of the treatment	Clinical assessment observation (F)	CC
U04	F.U.7	To be able to set indications and contraindications for the given dental procedure	Clinical assessment observation (F)	СС
U05	F.U.8	To present the disease risk assessment and select the optimal methods of oral disease prevention	Clinical assessment observation (F)	СС
U06	F.U.18	To perform treatment of dental caries , pulpal diseases and periapical diseases	Clinical assessment observation (F)	СС
U07	F.U.13	To use and perform the current documentation of the patient, referral for investigations or	Clinical assessment observation (F)	СС

		specialist for medical and dental treatment		
K01	K01	To cooperate in the group of professionals, in the environment multicultural and multinational	Summarizing methods: - constant evaluation by teacher (surveying) Shaping methods: - observation of student's work - discussion during classes - opinions of colleagues	CC
К02	K02	To be able to creates rules of the professional comradeship and the cooperation with representatives of other health care professionals	Summarizing methods: - constant evaluation by teacher (surveying) Shaping methods: - observation of student's work - discussion during classes - opinions of colleagues	CC
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	CC

<sup>\*\*</sup> 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: 5

Student's amount of work (balance of ECTS points)				
Student's workload	Student Workload (h)			
(class participation, activity, preparation, etc.)				

	Winter	Summer	Total (h)
1. Contact hours:	30	30	60
2. Online learning hours (e-learning):	50	40	90
3. Student's own work (self-study):	40	50	90
Total student's workload	120	120	240
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 8

No	Lectures
1	Latest qualitative and quantitative methods of detecting early caries lesions, decisions making
	regarding non-invasive and operative procedures, prognosis.
2	Adhesion to enamel and dentine; adhesive systems. Optimal choice of material for reconstruction of
	each cavity class.
3	Modern concept of caries prevention. Caries prevention and methods of progression control,
	arresting the disease process vs remineralization, the concept of preventive (non-operative)
	treatment.
4	Preventive and therapeutic therapy of elderly patients. Root caries – aetiology of development,
	clinical symptoms, treatment procedures and prevention.
5	Systemic diseases in dental practice: diabetes, cardio – vascular diseases (infarct, hypertension,
	disturbances of bleeding, stroke, anti-coagulants), diseases of the kidney, lungs, liver,
	immunosuppression, menopause and pregnancy.

#### Seminars

Semester 7

- 1 Apical periodontitis ethiopathomechanism, clinical and radiological features, therapeutic treatment, prognosis, first aid in endodontic treatment, endodontic retreatment.
- 2. Early and late complications of root canal treatment. Radiography in diagnosis and endodontic treatment
- 3. CAD/CAM
- 4. CAD/CAM
- 5. Strategies of infected root canals treatment (canals preparation, disinfecting materials). Endo-surgical treatment (apicoectomy, hemisection, root resection, bicuspidization, autoreplantation the choice of method, treatment strategies, prognosis). Retreatment of endodontic therapy: etiology, therapeutic procedures, revision of previously treated root canal system (endo surgical treatment).
- 6. Resorptions ethiopathomechanism, clinical and radiologic features, therapeutic treatment, prognosis. Endo – perio: etiopathogenesis, clinical and radiological features, classification, diagnostic methods, therapeutic treatment, prognosis.
- 7. Endodontic treatment in magnification dental loupes, microscope, rubber dum.

### **Practical classes**

Semester 7

## 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

#### B. clinical classes in blocks - rules

- -Clinical classes will begin with repetition of theory gained on 3<sup>nd</sup> 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 of clinical classes:
- 1. Repetition test of theoretical knowledge from 3<sup>rd</sup> year test

Apical periodontitis - ethiopathomechanism, clinical and radiological features, therapeutic treatment, prognosis, first aid in endodontic treatment, endodontic retreatment.

- 2. Early and late complications of root canal treatment. Radiography in diagnosis and endodontic treatment
- 3. CAD/CAM
- 4. CAD/CAM
- 5. Strategies of infected root canals treatment (canals preparation, disinfecting materials). Endo-surgical treatment (apicoectomy, hemisection, root resection, bicuspidization, autoreplantation the choice of method, treatment strategies, prognosis). Retreatment of endodontic therapy: etiology, therapeutic procedures, revision of previously treated root canal system (endo surgical treatment).
- 6. Resorptions ethiopathomechanism, clinical and radiologic features, therapeutic treatment, prognosis. Endo – perio: etiopathogenesis, clinical and radiological features, classification, diagnostic methods, therapeutic treatment, prognosis.
- 7. Endodontic treatment in magnification dental loupes, microscope, rubber dum. 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)

No	Topics of online classes	
1	Clinical case presentation No 1 (Cariology)  No1 Caries diagnostic, qualitative and quantitative methods of caries detection, latest methods of detecting early caries lesions, decisions making regarding non-invasive and operative procedures, prognosis.	
2	Clinical case presentation No 2 (Cariology) CAD/CAM group D  No2 ICDAS classification. The choice of optimal restorative material for each cavity class (GI, composites, amalgams)	
3	Clinical case presentation No 3 (Cariology) CAD/CAM group D  No3 Dental patient with systemic diseases: diabetes, cardio – vascular diseases (infarct, hypertension, disturbances of bleeding, stroke, anti-coagulants), diseases of the kidney, lungs, liver, immunosuppression, menopause and pregnancy.	
Clinical case presentation No 4 (Endodontics) CAD/CAM group E  No 4 Anatomy and morphology of pulp chambers and root canal's systems, primary and second access, root canal systems classifications: Vertucci's, Wein's, Molteni's		
5	Clinical case presentation No 5 (Endodontics) CAD/CAM group E  No5 Endodontic instruments and systems (hand and rotary), ultrasonic canal preparation	

6	Clinical case presentation No 6 (Endodontics) CAD/CAM group F No 6 Strategies of endodontic treatment: Stages of endodontic treatment, intracanal medication sequence, rinsing materials sequence, anesthesia, sealers, recommended root canal rinsing sequence versus literature.
7	Clinical case presentation No 7 (Endodontics) CAD/CAM group F No7 Endodontics: reversible and irreversible pulp diseases, symptoms, diagnosis, treatment.

#### Semester 8

1	Clinical dental treatment of the patients.
2	Latest qualitative and quantitative methods of detecting early caries lesions, decisions making
	regarding non-invasive and operative procedures, prognosis. Clinical dental treatment of the
	patients.
3	Clinical dental treatment of the patients.
4	Adhesion to enamel and dentine; adhesive systems. Optimal choice of material for reconstruction
	of each cavity class. Clinical dental treatment of the patients.
5	Clinical dental treatment of the patients.
6	Modern concept of caries prevention. Caries prevention and methods of progression control,
	arresting the disease process vs remineralization, the concept of preventive (non-operative)
	treatment. Clinical dental treatment of the patients.
7	Clinical dental treatment of the patients.
8	Preventive and therapeutic therapy of elderly patients. Root caries – aetiology of development,
	clinical symptoms, treatment procedures and prevention. Clinical dental treatment of the patients.
9	Clinical dental treatment of the patients.
10	Systemic diseases in dental practice: diabetes, cardio – vascular diseases (infarct, hypertension,
	disturbances of bleeding, stroke, anti-coagulants), diseases of the kidney, lungs, liver,
	immunosuppression, menopause and pregnancy. Clinical dental treatment of the patients.
11	Clinical dental treatment of the patients.
12	Focal infection - etiology, symptomatology, diagnosis, therapeutic procedures. Clinical dental
	treatment of the patients.
13	Final crediting - test and essay. Clinical dental treatment of the patients.
14	Clinical dental treatment of the patients.
15	Make up of back logs. Credit of subject. Clinical dental treatment of the patients.

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

- 1. Kidd E.A.M., Joyston-Bechal S.: Essentials of dental caries. 4rd ed. Oxford University Press, Oxford 2016
- 2. Banerjee A., Watson T.F.: "Pickard's Guide to Minimally Invasive Operative Dentistry", 10th ed. Oxford University Press, Oxford 2015
- 3. Heymann H., Swift E. and alt: Sturdevant's Art and Science of Operative Dentistry. Elsevier 6<sup>th</sup> ed., 2013

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

- 1. Tronstadt L.: Clinical endodontics: a textbook. 2rd ed. Georg Thieme Verlag, Stuttgart 2009
- 2. Torabinejad M., Walton R.E., Endodontics, principles and practic, 5th edition, Saunders Elsevier 2009
- 3. Ingle J.I., Bakland L.K.., Baumgartner J.C.: Endodontics, 6<sup>th</sup> ed. 2008

Didactic resources requirements (e.g. laboratory, multimedia projector, other...)

### dental camera, multimedia projector, computer

Preliminary conditions (minimum requirements to be met by the student before starting the module/course)

Student is admitted to 4<sup>th</sup> year classes after successful completion of the final test summarizing knowledge of the subject from the 3<sup>rd</sup> year, held at the end of the 6<sup>th</sup> semester.

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)

#### Forms of completing the course:

Credit form: theoretical knowledge and practical skills.

#### **Clinical classes:**

## • Option A - credit based on clinical procedures performed in patients

- students work in pairs, two patients per pair per class

## Completing the clinical procedures (both semesters of 4<sup>TH</sup> year study):

- dental examination, filling medical chart, dietary and oral hygiene instructions— x 3 and for each new patient
- preparation and restoration of 10 cavities
- endodontic treatment of 6 root canals in teeth and blocks including rotary preparation and obturation using warm gutta-percha

### • Option B – without patient

In case of lack of patient (student is not on duty or assisting) - preparation of clinical case given by tutor (theoretically with the textbook and/or practically using the phantom model used in the 2nd year or endodontic block with four-root canals (manufacturer VDW, catalog number: V040246000500) online orders on <a href="www.intertechdental.pl">www.intertechdental.pl</a> -> <a href="https://www.intertechdental.pl/oferta-i-sklep-online/hikashop-menu-for-brands-listing/product/416-modele-zebow-endodontycznych-iii.html">www.intertechdental.pl/oferta-i-sklep-online/hikashop-menu-for-brands-listing/product/416-modele-zebow-endodontycznych-iii.html</a>

### OPTION B ALONE IS NOT A BASE FOR CREDITING THE CLINICAL PART OF THE COURSE

It is ONLY the alternative when there is no option for clinical patients treatment (excluding online classes)

#### 4. Lectures

the presence on lectures is mandatory according to the Study Regulations

#### 5. Both semesters crediting:

- Gaining the positive notes from theoretical part (seminars/lectures and classes)
- Positive note from the FINAL TEST

### **FINAL CREDITING TEST (50 QUESTIONS)**

- will be held on the end of summer semester
- the date will be agreed with the Year Supervisor
- test will concern material from winter and summer semester classes as well as seminars/lectures (Cariology and Endodontics)

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.



# The diploma exam after the 5<sup>th</sup> year

Final (diploma) exam consists of two parts: theoretical and practical exam (multiple choice test – 100 questions). Both parts of the exam are treated synonymously, i.e. the exam must be awarded at least a satisfactory grade for each part of the examination, and admission to the second part of the examination is conditioned by the first part.

- **1. Practical** clinical interview, clinical examination, diagnosis, treatment planning, preventive recommendations, performing the clinical procedure.
- 2. Theoretical test consist of 100 questions. Conditions for passing: 70 % of correct answers.

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 less
(4.0)	important aspects
Satisfactory Plus	achievement of intended learning outcomes, with omitting some important
(3.5)	aspects or significant inaccuracies
Satisfactory	achievement of intended learning outcomes, with omitting some important
(3.0)	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 less	
(4.0)	important aspects	
Satisfactory Plus	achievement of intended learning outcomes, with omitting some important	
(3.5)	aspects or significant inaccuracies	
Satisfactory	achievement of intended learning outcomes, with omitting some important	
(3.0)	aspects or serious inaccuracies	
Unit realizing the subject	Dept. Of Conservative Dentistry with Endodontics, Medical University of Wroclaw	

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module		
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Full name	Degree/scientific or professional title	Discipline	Performed profession	Form of classes
Urszula Kaczmarek	Prof., DDS, PhD	Dentistry	dentist	lectures, seminars
Joanna Kobierska-	DDS, PhD	Dentistry	dentist	classes
Brzoza				
Kowalczyk-Zając	DDS, PhD	Dentistry	dentist	classes
Małgorzata				
Dagmara Piesiak-	DDS	Dentistry	dentist	classes
Pańczyszyn				
Agnieszka	DDS	Dentistry	dentist	classes
Czajczyńska-				
Waszkiewicz				
Natalia Jawor-	DDS	Dentistry	dentist	classes
Moczulska				
Marta Berdzik-	DDS	Dentistry	dentist	classes
Janecka				
Wojciech Grzebieluch	DDS, PhD	Dentistry	dentist	digital dentistry
				classes, lectures
Tomasz Staniowski	DDS, PhD	Dentistry	dentist	lectures



Date of Syllabus development	Syllabus developed by
20.09.2020	Agnieszka Czajczyńska-Waszkiewicz, DDS
	Signature of Head of teaching unit
	Prof. Katarzyna Skośkiewicz-Malinowska, DDS,PhD
Signature of Faculty Dean	