

			Syllab	ous fo	r acad	lemic	year:	2020/	2021					
Training cycle: 2019-2024														
				Des	scriptio	on of t	he cou	rse						
Module/Course			Denta	l Mat	erials				Group of detailed education results					
								Gi	roup	G	iroup r	name		
									c	ue	Р	re-clin	ical	
											s	cience	S	
Faculty			Facult	y of D	entist	ry								
Major			Denti	stry										
Unit realizing the subj	ect		Depar	tment	of Exp	erimer	ntal De	ntistry	,					
Specialties			-											
Level of studies			Unifor	m mag	gister s	tudies	Х*							
			1 <sup>st</sup> deg	ree st	udies									
			2 <sup>nd</sup> deg	gree st	udies									
			3 <sup>rd</sup> degree studies 🗆											
			postgraduate studies $\Box$											
Form of studies			X full-time X part-time											
Year of studies			II Semester 🗆 Winter											
			IV X Summer											
Type of course			X obligatory											
			limited choice											
			free choice / elective											
Course			X major basic											
Language of instruction	n		🗆 Polis	h X	Englisł	ם ח ר <u>י</u> ס	ther							
* mark 🛛 with an <b>X</b>														
					Numl	per of l	nours							
			[	r	Form	of edu	cation	r			1	<b>T</b>	1	1
Unit teaching the course	(1)	s (SE)	um classes (AC)	asses – not clinical	lasses (CC)	rry Classes (LC)	n Simulated ns (CSC)	Classes with Patient	t Classes – magister SCM)	anguage Course (FLC)	Education obligatory	al Practice(VP)	ly (Student's own	g (EL)
	Lectures	Seminars	Auditoriu	Major Cl (MC)	Clinical C	Laborato	Classes i Conditio	Practical (PCP)	Specialis studies ()	Foreign I	Physical (PE)	Vocation	Self-Stud work)	E-learnin
Winter Semester														
Direct (contact) education														
Online learning (synchronous)														



UNIWERSYTET MEDYCZNY IM. Piastów Śląskich we Wrocławiu

Appendix to Resolution No. 2186 of Senate of Wroclaw Medical University of 1 July 2020

Distance learnin (asynchronous)	ng																
Summer Semes	ter	I _		[			-						Γ				1
Direct (contact) education		5	9		46											90	
Online learning																	
(synchronous) Online learning																	
(asynchronous)																	
TOTAL per year	:																
Direct (contact)		5	9			46										9	D
education																	
Online learning																	
(synchronous) Online learning	,		_														
(asynchronous)																	
Educational obj	jectives	 s (ma	IX. 6	items)													
C1. Introduce	the stu	uder	ts t	o den	tal m	nateria	ls ar	nd the	eir pro	opert	ies.						
C2. Introduce	the stu	uden	its t	o dent	tal m	nateria	l pro	ocessi	ng te	chno	logie	s.	6.1				
Education resu	lt matr	ix fo	r mo	dule/d	ours: res	e in re sult an	latio d the	n to ve type (	erifica	tion r ss	neth	ods (	of the	inter	ndec	educ	ation
Number of	Numb	er of		Student	who	complet	es the	-71		Met	hods	of ver	ificatio	n Fo	orm o	of didad	tic
course education	major educat	tion		module/course knows/is able to					of in	tende Its (fo	d edu rmine	ication	cl **	ass *entei	the		
result	result									sum	marisi	ng)	, unu	al	bbrevi	ation	
W 01	C.W.	25		1. Def	ines	the ba									SE	MC	
				<sup>_</sup>			asic c	conce	ots	Ora	al res	pon	se (F)	) [L	, JL,	ivic	
		~ ~		of der	ntal r	nateri	als.	conce	ots	Ora Qu	al res izzes	pon (F)	se (F)	)   L	, JL,	ivic	
W 02	c.w.	24		of der 2. Def	ntal r ines	nateri the ty	als. pes	conce of der	ots ntal	Ora Qu Wr	al res izzes itten	pon (F)	se (F)	)   L <sub>.</sub>	, JL,	ivic	
W 02	c.w.	24 24		of der 2. Def mater	ines ines ials.	nateri the ty	als. pes	conce of der	ots ntal	Ora Qu Wr exa	al res izzes itten imin	pon (F) atior	se (F <u>)</u> n (S)	)   L	, JL,		
W 02 W 03	c.w. c.w.	24 24		of der 2. Def mater 3. Des secon	ital r ines ials. cribo dary	materi the ty es the	als. pes prim rials	once of der hary a in der	ots ntal nd ntal	Ora Qu Wr exa	il res izzes itten imin	pon (F) atio	se (F) n (S)	)   L <sub>.</sub>	, JL,		
W 02 W 03	c.w. c.w.	24 24		of der 2. Def mater 3. Des secon prostł	ntal r ines ials. scribe dary netic	materi the ty es the mate	als. pes prim rials	conce of der nary a in der	ots ntal nd ntal	Ora Qu Wr exa	al res izzes itten imin	pon (F) atior	se (F) n (S)	) L	, JL,	inc	
W 02 W 03	c.w. c.w.	24 24		of der 2. Def mater 3. Des secon prosth 4. Des	ntal r ines ials. cribe dary netic	materi the ty es the mate s. es adv	als. pes prim rials anta	conce of der nary a in der ges ai	ots ntal nd ntal	Ora Qu Wr exa	al res izzes itten imin	pon (F) atior	se (F)	) L	, JL,		
W 02 W 03	c.w.	24 24		of der 2. Def mater 3. Des secon prosth 4. Des disady	ntal r ines ials. cribo dary netic cribo vanta	nateri the ty es the mate s. es adv ages o	als. pes prim rials anta f diff	conce of der hary a in der ges au erent	ots ntal nd ntal nd	Ora Qu Wr exa	al res izzes itten imin	pon (F) atio	se (F)	) L	, JL,		
W 02 W 03 W 04	c.w. c.w. c.w.	24 24 24		of der 2. Def mater 3. Des secon prosth 4. Des disadv denta	ntal r ines ials. cribe dary netic cribe vanta l ma	nateri the ty es the mate s. es adv ages o terials	prim prim rials anta f diff	conce of der hary a in der ges au erent	ots ntal nd ntal nd	Ora Qu Wr exa	al res izzes itten imin	pon (F) atior	se (F <u>)</u> n (S)	) L.	, JL,		
W 02 W 03 W 04	c.w. c.w.	24 24 24		of der 2. Def mater 3. Des secon prosth 4. Des disadv denta 5. Exp	intal r ines ials. cribe dary netic cribe vanta l ma lains	nateri the ty es the mate s. es adv ages o terials	prim prim rials anta f diff ods	conce of der nary a in der ges a ges a ferent of	ots ntal nd ntal nd	Ora Qu Wr exa	il res izzes itten min	pon (F) atior	se (F)	) L	, JL,		
W 02 W 03 W 04	с.w. с.w. с.w.	24 24 24 24		of der 2. Def mater 3. Des secon prosth 4. Des disady denta 5. Exp proce	intal r ines ials. cribe dary netic cribe vanta l ma lains ssing	nateri the ty es the mate s. es adv ages o terials s meth g of de	als. pes prim rials anta f diff ods ntal	of der nary a in der ges a Gerent of mate	ots ntal nd ntal nd	Ora Qu Wr exa	il res izzes itten min	pon (F) atior	se (F)	) L	, 32,		



			I				
W 06	C.W.25	6. Knows the rules of the					
		organization of a technical					
		workshop.					
U 01	C.U13	1. The student uses the tools	Examination of	SE, MC			
		and laboratory equipment.	the work (F)				
U 02	C.U11	2. Able to select appropriate					
		materials for the basic					
		laboratory work.					
U 03	C.U13	3. Performs basic laboratory					
		work.					
U 04	C.U13	4. Able to perform					
		technological procedures.					
К 01		1. Work in a group of students.	Evaluation of	MC			
К 02		2. Take part in practical tasks.	students' attitude				
			during classes (F)				
** L - lectu	ure; SE - seminar; AC – auc	ı litorium classes; MC – major classes (non-clin	nical); CC – clinical classes; L	C – laboratory classes;			
SCM – spec	cialist classes (magister stu	udies); CSC – classes in simulated conditions; F	LC – foreign language course	e; PCP practical classes			
with patier	nt; PE – physical educatior	n (obligatory); VP – vocational practice; SS – s	elf-study, EL – E-learning .				
Bloaco m	ark on scale 1 5 how	the above effects place your classes	in the following estage	vriace			
commun	vication of knowledge	skills or forming attitudes:	in the following catego	nies.			
Knowled	lge: 5	, skills of forming attitudes.					
Skills: 4							
Social co	mpetences: 3						
	·						
Student'	s amount of work (ba	alance of ECTS points)					
Student'	s workload		Student Work	load (h)			
(class pa	rticipation, activity, p	reparation, etc.)					
1. Conta	ct hours:		60				
2. Online	e learning hours (e-lea	arning):	0				
3. Studer	nt's own work (self-st	udy):	90	90			
Total stu	dent's workload		150	150			
ECTS poi	ints for module/cours	se	6				
Comme	nts						
Content	t of classes (please ent	er topic words of specific classes divided into	their didactic form and ren	nember how it is			
translated	to intended educational e	iffects)					
Lectures	; [			7			
No	1 Conroal alassas (	Lectures		4			
$\left \right $ 1	1.Genreal classes of	Dental Materials					
	2.Physico-mechanic	al Properties of Dental Materials					
	S. BIOCOMPATIBILITY (	Dental materials					
2	1. Impression Mater	rials		-			



3	1. Acrylic Denture Base Resins	
4.	1.Dental Ceramics	
	4 Depted Alleye	
5.	1. Dental Alloys	
	3. Joining techniques of ceramic covering of the alloy surfaces	
	s. soming rechniques of cerumic covering of the anoy surfaces	
Semi	nars	
1. Th	ermoplastics materials.	
2. Fle	xible materials.	
3. Co	nposites.	
Decet		
Pract	Cal classes	
INF.	Subject and practical work	ratory
1.	equipment and organization of dental laboratory	Jatory
2.	Gypsum products and isolating materials.	
	Demonstration of the way of using tools. Performance of gypsum cubes of two	vo kinds of
	gypsum (dim. 3x3x3cm and 1,5x1,5x1,5cm), trimming.	
	Evaluation of the student's work	
3.	Reversible and irreversible flexible dental impression materials.	
	1) Measurement of the total setting time for alginate impression material.	
	2) Taking the impressions of full-arch phantoms.	
	3) Making the gypsum model, trimming.	
	Evaluation of the student's work	
4.	Reversible and irreversible rigid dental impression materials. Impression trav	<b>S</b> .
		-
	1) Preparation of impression trays (adhesive layer).	
	2) Low viscosity-high viscosity impression with silicone materials.	
	3) Measurement of total setting time for silicones and polyether impression	materials.
	Evaluation of the student's work	for Acrilic
5.	denture base resins	
	עבוונערב שמשב רבאווא.	
	Performance of model wax cube (dim. 1x1x1cm) for acrylic base resins polym	erization.
	Evaluation of the student's work	



6.	Acrylic denture base resins – heat-curing.
	1) Initial polymerization of acrylic resins
	2) Placing acrylic resin in the mold of flask
	2) Compressing and placing flack in the polymerization frame
	4) Short – time polymerization
	4) Short – time polymenzation.
	Evaluation of the student's work
7.	Acrylic denture base resins – self-curing.
	Derfermence of colf ouring condication becomints on the edertulous movillant or
	mendibular medale
	Evaluation of the student's work
8.	Acrylic denture base resins – self-curing.
	Performing of repair of broken acrylic baseplate.
	Evaluation of the student's work.
9.	Finishing and polishing.
	Finishing and polishing of all acrylic student's manual works
	Thisming and polishing of all acrylic student's manual works.
	Evaluation of the student's work
10	Dental alloys thermonlastic and composite materials used in dentistry
10.	Dental alloys, thermoplastic and composite materials used in dentistry.
	1 Demonstration of making occlusal splint base from Erkodur
	2 Demonstration of making the second part of the occlusal splint with light-cured
	material
11	Make up week
12.	Final test.
Othe	r
-	
Basic	literature (list according to importance, no more than 3 items)
1. Jol	nn M. Powers., John C. Wataha: Dental Materials: Foundations and Applications, 11th
editio	on. Elsevier 2016.
2 10	on M. Powers John C. Wataba: Dental Materials. Properties and Manipulation. 10th edition
Mock	2012
	Jy 2012.
Addit	ional literature and other materials (no more than 3 items)
1. Ma	arcia Gladwin, Michael Bagby: Clinical Aspects of Dental Materials Theory, Practice and Cases
ISBN	<ul> <li>– 2nd ed., Philadelphia: Lippincott Williams &amp; Wilkins, 2009.</li> </ul>
2. Ke	nneth J Anusavice, Phillips' Science of Dental Materials, 11th Ed. Saunders 2003.
Didad	tic resources requirements (e.g. laboratory, multimedia projector, other)
Phan	tom room, dental lab, multimedia projector, computer, laboratory equipment, phantoms.



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

Medical uniform, boots and helmet variables.

Practical activities, examination of the work, written examination.

**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)

Pass of the manual training and final test (multiple choice test, 20 questions, 60% to pass) – at the end of semester, summarizing assessment. The credit for the course is a part of the exam from the Preclinical Dentistry.

Grade:	Criteria (only for courses/modules ending with an examination)
Very Good	
(5.0)	
Good Plus	
(4.5)	
Good	
(4.0)	
Satisfactory Plus	
(3.5)	
Satisfactory	
(3.0)	
	Criteria (only for courses/modules ending with e credit)
Credit	Pass manual training and final test (multiple choice test, 20 questions, 60% to
	pass) – at the end of semester, summarizing assessment. The credit for the course
	is a part of the exam from the Preclinical Dentistry.

Grade:	Criteria (examination evaluation criteria)
Very Good	
(5.0)	
Good Plus	
(4.5)	
Good	
(4.0)	
Satisfactory Plus	
(3.5)	
Satisfactory	
(3.0)	
Unit realizing the	Department of Experimental Dentistry
subject	
Unit address	ul. Krakowska 26, 50-425 Wrocław



Appendix to Resolution No. 2186 of Senate of Wroclaw Medical University of 1 July 2020

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Person responsible	Prof. dr hab. n. med. M. Więckiewicz
for module	
Coordinator	Prof. dr hab. n. med. M. Więckiewicz
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E-Mail	stom.dosw@umed.wroc.pl

List of persons conducting specific classes									
Full name	Degree/scientific or professional title	Discipline	Performed profession	Form of classes					
Mieszko Więckiewicz	Prof. dr hab.	Medical science	dentist	MC					
Wojciech Florjański	Dr	Medical science	dentist	MC					
Andrzej Małysa	Dent.	Medical science	dentist	SE, L					

Date of Syllabus development

## Syllabus developed by

21.09.2020 r.

Dr n. med. Joanna Smardz

Signature of Head of teaching unit

Prof. dr hab. Mieszko Więckiewicz

Signature of Faculty Dean

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