



Syllabus for academic year: ...2020/2021														
Training cycle:														
Description of the course														
Module/Course	Preclinical restorative dentistry										Group of detailed education results			
											Group code C	Group name III- Preclinical study		
Faculty	Faculty of Dentistry													
Major	Dentistry													
Unit realizing the subject	Department of Pedodontics and Preclinical conservative dentistry													
Specialties	Conservative dentistry													
Level of studies	Uniform magister studies <input checked="" type="checkbox"/> 1 st degree studies <input type="checkbox"/> 2 nd degree studies <input type="checkbox"/> 3 rd degree studies <input type="checkbox"/> postgraduate studies <input type="checkbox"/>													
Form of studies	<input checked="" type="checkbox"/> full-time <input checked="" type="checkbox"/> part-time													
Year of studies	II										Semester	<input checked="" type="checkbox"/> Winter <input type="checkbox"/> Summer		
Type of course	<input checked="" type="checkbox"/> obligatory <input type="checkbox"/> limited choice <input type="checkbox"/> free choice / elective													
Course	<input checked="" type="checkbox"/> major <input checked="" type="checkbox"/> basic													
Language of instruction	<input type="checkbox"/> Polish <input checked="" type="checkbox"/> English <input type="checkbox"/> other													
* mark <input type="checkbox"/> with an X														
Number of hours														
Form of education														
Unit teaching the course	Lectures (L)	Seminars (SE)	Auditorium classes (AC)	Major Classes – not clinical (MC)	Clinical Classes (CC)	Laboratory Classes (LC)	Classes in Simulated Conditions (CSC)	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)
Winter Semester														
Direct (contact) education				30										
Online learning (synchronous)		15												
Distance learning (asynchronous)				30										
Summer Semester														



Direct (contact) education														
Online learning (synchronous)														
Online learning (asynchronous)														
TOTAL per year:														
Direct (contact) education				30										
Online learning (synchronous)		15												
Online learning (asynchronous)				30										
Educational objectives (max. 6 items)														
C1. To obtain the basic knowledge on carious process														
C2. To obtain the basic theoretical and practical knowledge regarding dental treatment and caries lesions restoration, restorative materials and restorations placement on phantom patient.														
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 <i>**enter the abbreviation</i>					
W 01	C. W.26	To define caries disease			Oral response,(F), test (P), OSCE				SE, MC					
W02	C.W. 25	To describe and explain the principles of conventional and adhesive preparation of all classes of dental cavities according Blacks classification			Oral response,(F), test (P), essay (P), discussion (F), OSCE				SE, MC					
W03	C.W. 24	To describe properties of dental restorative materials and their clinical application			Oral response,(F), test (P),discussion (F), OSCE				SE, MC					
W04	C.W.28	To characterize of methods of decay restoration of all cavities classes according to Black classification			Oral response,(F) , discussion (F), essay (P), OSCE-test (P)				SE, MC					
W05	C.W. 27	To explain the goal and performance of pits and fissures sealing			Oral response,(F), test (P),discussion (F), OSCE-test (P)				SE, MC					



W06	C.W. 26	To describes and differentiates the loss of hard tissue of non-carious origin	Essay (F), discussion (F), presentation (F), OSCE-test (P)	MC
U01	C.U 05	To perform preparation of all cavities classes according to Black classification on phantom patient	Observation (F) – grade scale from 2 to 5 (F), Assessment OSCE-test (P)	MC
U02	C.U 12	To perform restoration of all cavities classes according to Black classification	Observation, Assessment (F), OSCE-test (P)	MC
U03	C.U 11	To elect restorative materials and connecting based on the properties of materials and the clinical conditions of the caries and non caries cavities	Observation, Assessment (F), discussion (F), OSCE-test (P)	MC
U04	C.U4	To be able to indicate own errors in the reconstruction of the tooth decay and give the way of their correction	Observation, Assessment OSCE-test (P)	MC
U05	C.U5	To be able to work with the simulated patient in laying position by use in proper way the dental instruments	Observation, Assessment OSCE-test (P)	MC
U06	C.U 10	To be able to seal pits and fissures	Observation, Assessment OSCE-test (P)	MC
K 01	K 01	To be able to create rules of the professional comradeship and the cooperation with representatives of other health care professionals	<u>Summarizing methods:</u> - constant evaluation by teacher (surveying) <u>Shaping methods:</u> - observation of student's work - discussion during classes - opinions of colleagues	MC
K02	K02	To cooperate in the group of professionals, in the environment multicultural and multinational	<u>Summarizing methods:</u> - constant evaluation by teacher (surveying) <u>Shaping methods:</u>	MC



			- observation of student's work - discussion during classes - opinions of colleagues	
K03	K03	To be aware of its own restrictions and is able to plan educational activity	<u>Summarizing methods:</u> - constant evaluation by teacher (surveying) <u>Shaping methods:</u> - observation of student's work - discussion during classes - opinions of colleagues	MC

** 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: 4

Social competences: 3

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

Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)
1. Contact hours:	30
2. Online learning hours (e-learning):	45
3. Student's own work (self-study):	15
Total student's workload	90
ECTS points for module/course	3
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

Seminars

Semester 3

Nr	Theme
1.	Caries etiopathomechanism: cariogenic bacteria (plaque - biofilm), dietary fermentable carbohydrates, factors associated with the teeth (saliva, fluoride), and the time factor.



1.	<p>2. Dental caries – microscopic and clinical manifestations; white spot, progression of carious lesions, superficial, medium, deep caries</p> <p>3) Dental cavities classification by Black and SiSta</p> <p>4) Dental caries treatment: non-invasive and invasive (operational). Non-invasive treatment (remineralization). Fluorite; Caseinate complex with amorphous calcium phosphate; Bioactive glass-phosphosilicon calcium-sodium.</p> <p>5) Minimal invasive treatment: (1) fissure sealing, (2) caries infiltration, (3) widen fissure sealing, (4) preventive resin restoration, (5) tunnel preparation, (6) key hole preparation, (7) ART technique; (8) chemo-mechanical caries removal, (9) abrasive preparation (10) laser preparation,</p> <p>6) Invasive methods of dental caries treatment - Steps of cavities preparation by modified Black`s principles (amalgam and composite resin); Initial tooth preparation stages: Outline form and initial depth, Dental caries removal, Resistance and retention form, Finishing external walls, choice of material and their preparation; wash and dry the cavity; filling the cavity; Finish filling.</p> <p>7) Class I composite and amalgam restoration – step by step</p>	
2	<p>1) Materials for reconstruction of hard tissues of the tooth. Distribution: temporary filling materials, liners, final filling materials, materials for filling holes and fissures, adhesive systems.</p> <p>2) Clinical application of dental restorative materials (indications and contraindications)</p> <p>a) Glass-ionomer; biomechanics; (types: type I - Luting, type II - Fillings, type III - Liners and Bases, type IV - Sealants , Type V - orthodontics, VI – Core ; types: conventional - and modified resin - light-cured;</p> <p>b) Composites – consistency (flow, normal, packable, pit-and-fissure sealant); biomechanics, adhesion, clinical technique (acid-etching and bonding technique), polymerization methods composite restoration; layers; use of flowable composite</p> <p>c) compomer, d) ormocer, e) giomer,</p> <p>f) Amalgam; low-copper, high-copper, shape of the particles - spherical, irregular.</p> <p>3) Polymerization of composites and glass ionomer; polymerization techniques, reconstruction techniques (bulk, layered).</p> <p>4. Adhesive system - generations (I-VIII), the way the application.</p> <p>5. Amalgam filling - clinical stages; composite resins - clinical stages.</p> <p>6 Liners -division</p> <p>7. Liners and base: composition, defect, advantages, clinical application of each of the materials (phosphate, carboxylic, GI, ZnO + eugenol, Ca (OH) 2 purpose of use, When you use liners?, application techniques, materials for base and liner</p> <p>9 Adhesion and non-adhesion of the liners</p> <p>10. Temporary fillings</p>	
3.	<p>Preparation and filling of Class I-V cavities, step by step , adhesive and non-adhesive</p> <p>1) Class I composite restoration – step by step</p> <p>2) Class I amalgam restoration – step by step</p> <p>3) Class II composite restoration – step by step</p> <p>4) Class II amalgam restoration – step by step</p> <p>5) Class III composite restoration – step by step</p> <p>6) Class III GI restoration – step by step</p> <p>7) Class IV composite restoration – step by step</p> <p>8) Class V composite restoration – step by step</p> <p>9) Class V amalgam restoration – step by step</p> <p>10) Matrices and retainers - types and application, wedges, gum bleeding, proximal contact, occlusal surface reconstruction</p>	
4	<p>1) Non-cariou lesions - causes, clinical view, therapeutic procedure. introduction and differentiation with carious cavities Erosion, abfraction, attrition,</p> <p>2) Traumatic damage to teeth</p> <p>3) Differentiation of carious and non-cariou lesions</p> <p>4) Developmental disorders - hypoplasia-causes, clinical view, treatment strategies.</p> <p>5) Others hard tissue defects – clinical view, therapeutic procedure, minimally invasive class II cavity preparation (slot preparation, tunnel preparation)</p>	



5	1) Indirect fillings in posterior teeth: inlay, onlays, overlay, pinlay. 2) CAD / CAM (Computer-Aided Design and Computer-Aided Manufacturing). 3) The rules of hygiene <ol style="list-style-type: none"> a. cross-infection b. basic knowledge of disinfection and sterilization c. Handpiece conservation, suction and other parts of dental unit d. the patient and the physician as a potential source of infection e. protection of doctor and patient 										
Practical classes Semester 3											
1. Introductory exercise											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 45%;"><u>Introduction</u></th> <th style="width: 15%;"><u>Repetition</u></th> <th style="width: 15%;"><u>Demonstration</u></th> <th style="width: 25%;"><u>Practical</u></th> </tr> </thead> <tbody> <tr> <td> 1. Simulating tutorials calendar, curriculum, requirements, evaluation and conduct; professional behaviour during simulating procedures 2. Use and care of work place; dental unit, handpieces, instruments, arrangement of work place, proper use and maintenance of work place 3. Demonstration – operator and patient positioning 4. Assembly and disassembly of the phantom, cleaning, use of dental unit. 5. Proper use and clean maintenance of handpieces; sorting instruments in the appropriate set 6. Types of dental instruments: diagnostic tools for preparation and filling, tips, drills (types and shapes) 7. The rules of hygiene <ol style="list-style-type: none"> a) basic knowledge of disinfection and sterilization b) maintenance tips, suction and other dental unit parts c) the patient and the physician as a potential source of infection d) protection of doctor and patient e) incorrect habits </td> <td> Teeth and instruments (1) Dental nomenclature (2) Numerical identification of teeth (3) Dental instruments </td> <td> 1) Hand instruments grip 2) Dental handpiece grip 3) Finger rest 4) Cutting technique 5) Keeping ergonomic posture surgery in the correct distance between the phantom patient and the operator, </td> <td> 1) Drilling in different types of materials (glass, wood, plastic, gypsum). Preparation of concrete shape in gypsum 2. Preparation predetermined shape in the teeth, plaster, acrylic: Shape round-diameter-from 2 to 3 millimeters and a depth of from 1 to 3-4 millimeters, oval, square, trapezoidal with different depths <u>Attention</u> Cariogenesis – metabolism of sugars (biochemistry) - homework </td> </tr> </tbody> </table>				<u>Introduction</u>	<u>Repetition</u>	<u>Demonstration</u>	<u>Practical</u>	1. Simulating tutorials calendar, curriculum, requirements, evaluation and conduct; professional behaviour during simulating procedures 2. Use and care of work place; dental unit, handpieces, instruments, arrangement of work place, proper use and maintenance of work place 3. Demonstration – operator and patient positioning 4. Assembly and disassembly of the phantom, cleaning, use of dental unit. 5. Proper use and clean maintenance of handpieces; sorting instruments in the appropriate set 6. Types of dental instruments: diagnostic tools for preparation and filling, tips, drills (types and shapes) 7. The rules of hygiene <ol style="list-style-type: none"> a) basic knowledge of disinfection and sterilization b) maintenance tips, suction and other dental unit parts c) the patient and the physician as a potential source of infection d) protection of doctor and patient e) incorrect habits 	Teeth and instruments (1) Dental nomenclature (2) Numerical identification of teeth (3) Dental instruments	1) Hand instruments grip 2) Dental handpiece grip 3) Finger rest 4) Cutting technique 5) Keeping ergonomic posture surgery in the correct distance between the phantom patient and the operator,	1) Drilling in different types of materials (glass, wood, plastic, gypsum). Preparation of concrete shape in gypsum 2. Preparation predetermined shape in the teeth, plaster, acrylic: Shape round-diameter-from 2 to 3 millimeters and a depth of from 1 to 3-4 millimeters, oval, square, trapezoidal with different depths <u>Attention</u> Cariogenesis – metabolism of sugars (biochemistry) - homework
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<p>sharp angle between the walls and the bottom of the cavity, NOT parallel walls) c opening and outline form of the defect, the determinants d resistance form e retention form f adhesive materials and the shape of the cavity c principles of cavity preparation Class I (location, outline correct and errors (excessive preparation)) d. Explanation of and relationships between the size and shape of the defect, the location and shape of the cavity, the material and shape of the cavity of the tooth, anatomy and the outline and shape of the cavity h corresponding slope edge of the cavity i Determinants outline the cavity shape, resistance and retention form, cavity margins preparation (hand instruments) 4 Hand tools - chisels, enamel trimmers 5 Modeling fillings, shaping occlusal surface 8 Control of the occlusion 9.Fissur sealing - indications, treatment techniques, tools and materials 10. Fissure sealing procedures 11. Preventive resin restoration; PRR A; indications, clinical technique, instruments, materials 12 Preparation of small Class I cavity as preventive resin restoration PRR B; indications, clinical technique, instruments, materials</p>	<p>(2) Numerical identification of teeth (3) Dental instruments</p>	<p>patient and the operator, 2) Setting the patient and the operator to work in the upper and lower jaw 3) Fissure sealing, widen fissure sealing (permanent natural teeth) – PRR A; Preparation of small Class I cavity connected with preventive resin restoration - PRR B 4) Class I cavity preparation for composite and amalgam and fill it with temporary filling.</p>	<p>3) Preparation of small Class I cavity as preventive resin restoration - PRR B 4) Class I cavity preparation – composite (simple, complex, maxilla, mandible, molar, premolar and the establishment of a temporary filling) 5) Class I cavity preparation – composite (simple, complex, maxilla, mandible, molar, premolar and the establishment of a temporary filling) 6) Class I cavity preparation – amalgam (simple, complex, maxilla, mandible, molar, premolar and the establishment of a temporary filling) 7) Name all stages of cavity preparation, cavity walls, tools. 8)Accurate modeling of the occlusal surface with a temporary filling Attention Temporary filling</p>
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3. Class I Amalgam, Composite

Introduction

1. Etiology and caries progression in pits, fissures
2. Choosing the right method of treatment depending on the stage caries lesion
3. Arrested caries, when and why? Using of dental probe is safe?
4. Steps of cavities preparation by modified Black's principles
 - a) Outline form
 - b) Dental caries removal
 - c) Resistance and retention form
 - d) (Not - extension for prevention, Not – sharp walls-bottom angle, Not – parallel walls):
 - d. when to cover cusps;
 - c) Determinants, principles and specification of Class I cavity preparation;

Demonstration

1. Ergonomic posture during operative procedures (distance between dentist eye and tooth)
2. Work in upper and lower arch (usage of dental mirror and positioning in upper and lower teeth)
3. Cavity Class I preparation and restoration by amalgam
4. Cavity Class I preparation and restoration by composite

Practical

1. Preparation and restoration Class I cavities for composite (simple, complicated; maxilla, mandible; molar and premolar)
2. Preparation and restoration Class I cavities for amalgam(simple, complicated; maxilla, mandible; molar and premolar)



<p>5. Steps of cavities preparation by Black`s 6. Resistance and retention form 7. Walls angles in cavity preparation for amalgamat 8. Basic information about materials GI and amalgam. 9. Preparation of amalgam ang GI 10. Instruments for amalgam restoration (excavators, chisels)</p>		<p>3. Names of all steps of cavity preparation</p>
<p>4. 2 x Class I - continuation</p>		
<p><u>Introduction</u></p>	<p><u>Demonstration</u></p>	<p><u>Practical</u></p>
<p>1. Dental caries etiology and morphology, caries progression in pits, fissures. 2. Progression of carious lesions – method of preparation and restoration 3. Using of dental probe is safe? 4. Steps of cavities preparation by modified Black`s principles (Not - extension for prevention, Not – sharp walls-bottom angle, Not – parallel walls): a) Outline form b) Dental caries removal c) Resistance and retention form d) Proximal wall preparation e) Gingival wall preparation (CEJ location, materials) f) Proximal parts of lateral wall preparation g) cusps reconstructions 5. Amalgam cavity restoration angles 6. Basic information about amalgam and GI 7. Preparation of amalgam and GI 8. Instruments for amalgam restoration (excavators, chisels) 9. Matrices and retainers - types and application, wedges 10. Smooth enamel margins 11. Stages of preparation of cavities by Black, Black and Sista - repeat, 12. Proximal point, contour filling, preparation and polishing</p>	<p>1. Ergonomic posture during operative procedures (distance between dentist eye and tooth) 2. Work in upper and lower arch (usage of dental mirror and positioning in upper and lower teeth) 3. Cavity Class I preparation and restoration by amalgam 4. Cavity Class I preparation (matrices and retainers - types and application, wedges, proximal contacts) and restoration by liner and amalgam with proximal contacts and occlusal surface modeling</p>	<p>1. Preparation and restoration 2 Class I cavities (simple, composed; maxilla, mandible; molar and premolar) and 1 Class I cavity 2. Preparation and restoration 2 Class I cavities with reconstruction of occlusal surface 3. Names of all steps of cavity preparation 4. Before composite restoration filling by temporary materials 5. Before restoration – modeling all surfaces by plasticine 6. Preparation of simple Black II (maxilla or mandible, molar or premolar) under the assumption of an amalgam filling and a temporary filling.</p>



5. 4 × Class V, permanent and temporary fillings		
<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>
<p>1. Morphology of Class V</p> <p>2. Rules of Class V cavity preparation.</p> <p>3. geometry of cervical cavity (amalgam, GI, composites)</p> <p>b) preparation - esthetics and composites adhesion (enamel contouring)</p> <p>c) steps and drills of Class V cavities preparation</p> <p>d) preparation, lack of preparation (when you can dispense with cavity preparation)</p> <p>4) Reconstruction of tooth shape</p> <p>5) the use of retraction floss, matrices</p> <p>6) Gingival wall (presence or lack of enamel) – procedures, prognosis</p> <p>7) Liners application and materials</p> <p>8) Finishing and polishing of restoration, shape of Class V restoration</p> <p>9) Mistakes and after effects (shape – problems and its solutions, overhang, leakiness, occlusal mistakes, caries secundaria)</p> <p>10) The reasons for the loss of filling, improper application of bonding agent, saliva, insufficient rinsing, bad etching,</p> <p>11) Stages of cavity preparation by Black, Black and SiSta - repertory</p>	<p>1. Ergonomic posture during operative procedures (distance between dentist and tooth)</p> <p>2. Work in upper and lower arch (usage of dental mirror and positioning in upper and lower teeth)</p> <p>3. Conventional and adhesive preparation of Class V cavity enamel preparation, reconstruction.</p>	<p>1. Preparation of 4 Class V preparation (maxilla, mandible, molar), restoration by composite, glass-ionomer (sandwich technique) and amalgam</p> <p>2. Names of all steps of cavity preparation</p> <p>3. Before permanent filling place temporary filling</p>



6. 5 × Class V		
<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>
<p>1. Morphology of Class V</p> <p>2. Cavity Class V preparation by conventional and adhesive mode</p> <p>3. geometry of cervical cavity (amalgam, GI, composites)</p> <p>b) preparation - esthetics and composites adhesion (enamel contouring)</p> <p>c) steps and drills of Class V cavities preparation</p> <p>d) preparation, lack of preparation (when you can dispense with cavity preparation)</p> <p>4) Reconstruction of tooth shape</p> <p>5) Gingival wall (presence or lack of enamel) – procedures, prognosis</p> <p>6) Mistakes and after effects (shape – problems and its solutions, overhang, leakiness, occlusal mistakes, caries secundaria)</p> <p>7) The reasons for the loss of filling, improper application of bonding agent, saliva, insufficient rinsing, bad etching,</p>	<p>1. Ergonomic posture during operative procedures (distance between dentist eye and tooth)</p> <p>2. Work in upper and lower arch (usage of dental mirror and positioning in upper and lower teeth)</p> <p>3. Conventional and adhesive preparation of Class V cavity</p> <p>4. Filling of Class V – amalgam, composite resin, compomer, GI</p>	<p>1. Preparation of 4 Class V preparation (maxilla, mandible, molar), restoration by composite, glass-ionomer (sandwich technique) and amalgam</p> <p>2. Names of all steps of cavity preparation</p>



7. - Class II – preparation 2 cavities, Dental materials continuation 9.00 – 12.00		
<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>
<p>1 Etiology and pathogenesis of dental caries, dental caries in pits and fissures and smooth surfaces;</p> <p>2 Choosing the right method of treatment according to the severity of the caries lesion</p> <p>3. Using of dental probe is it safe – arested caries?</p> <p>4. Steps of cavities preparation by modified Black's principles</p> <p>a) Outline form</p> <p>b) Dental caries removal</p> <p>c) Resistance and retention form</p> <p>d) Not - extension for prevention, Not – sharp walls-bottom angle, Not – parallel walls</p> <p>e) Proximal wall preparation</p> <p>f) Gingival wall preparation (CEJ location, materials)</p> <p>g) Proximal parts of lateral wall preparation</p> <p>h) cusps reconstructions</p> <p>5. Stages of cavity preparation by Black,</p> <p>6. resistance and retention form, how to get the retention</p> <p>7. The corresponding angles of preparation and filling in the application of amalgam</p> <p>8. basic information about materials and amalgam GI</p> <p>9. Preparation for amalgam and cement GI</p> <p>10. Instruments for cavity preparation: chisel, enamel trimmers.</p> <p>11. Matrices and retainers - types and application, wedges. Multisurface cavity preparation and restoration</p> <p>a. Cusp and tooth fracture</p> <p>b. Proximal point – problems and its solutions</p> <p>c. Reconstruction of the tooth with cusp fracture</p> <p>12. Sandwich technique</p> <p>a. indications</p> <p>b. closed and opened technique</p> <p>c. materials</p> <p>13 Matrices and retainers - types and application, wedges</p> <p>14. Biomechanics of teeth and materials</p> <p>15. Composites and GI – clinical technique, material and teeth preparation, layer technique, adhesion, advantages and disadvantages</p> <p>16. Enamel margin preparation</p> <p>17. Steps of cavities preparation by Black's principles; dental cavities classification by Black and SiSta</p>	<p>1. Ergonomic posture during operative procedures (distance between dentist eye and tooth)</p> <p>2. Work in upper and lower arch (usage of dental mirror and positioning in upper and lower teeth)</p> <p>3. Preparation and restoration of 1 Class II cavity by sandwich technique</p> <p>4. Class II simple and complex - differences</p> <p>5. Preparation and restoration 1 Class II cavities by amalgam.</p> <p>6. Cavity preparation class II, an appropriate matrix and wedge point of contact, contouring matrix, leak test, backing and filling amalgam of carving and modeling occlusal contact surface</p> <p>7. Cavity preparation type the MOD and MOD composite filling</p>	<p>1.Preparation and restoration 1 Class II cavities by composite resin.</p> <p>2. Preparation and filling composite (maxilla or mandible, molar or premolar). Sandwich technique</p> <p>3 Continued preparation and amalgam filling one cavity class II (straight, maxilla or mandible, molar and premolar)</p> <p>4. Preparation of MOD (maxilla or mandible, molar or premolar). Sandwich technique and a temporary filling.</p> <p>5. Preparation of MOD (maxilla or mandible, molar or premolar). Sandwich technique and a temporary filling.</p> <p>6. Name all stages of cavity preparation, cavity walls, tools</p> <p>7. Before completing the final fill temporary</p>



18. Proximal point, restoration margin, polishing.			
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8. - Class II cavities, composites, MOD, MODB, Matrices, Materials

<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>
<p>1 Etiology and pathogenesis of dental caries, dental caries in pits and fissures and smooth surfaces; 2 Choosing the right method of treatment according to the severity of the caries lesion 3. Using of dental probe is it safe – arrested caries? 4. Steps of cavities preparation by modified Black’s principles a) Outline form b) Dental caries removal c) Resistance and retention form d) Not - extension for prevention, Not – sharp walls- bottom angle, Not – parallel walls e) Proximal wall preparation f) Gingival wall preparation (CEJ location, materials) g) Proximal parts of lateral wall preparation h) cusps reconstructions 5. Stages of cavity preparation by Black, 6. resistance and retention form, how to get the retention 7. The corresponding angles of preparation and filling in the application of amalgam 8. basic information about materials and amalgam GI 9. Preparation for amalgam and cement GI 10. Instruments for cavity preparation: chisel, enamel trimmers. 11. Matrices and retainers - types and application, wedges. Multisurface cavity preparation and restoration a. Cusp and tooth fracture b. Proximal point – problems and its solutions</p>	<p>1 Keeping ergonomic posture surgery in the correct distance between the phantom patient and the operator, 2 Position the patient and the operator to work in the maxilla and mandible 3 Filling a cavity MOD, MOD 6 sandwich technique 7 Slot preparation and Tunnel preparation 8 The demonstration of primers, bonds and etching-gels 9 Temporary fillings - presentation, application 10 Liner- when to use</p>	<p>1 Cavity preparation class II (maxilla, mandible, molar), filling sandwich (open sandwich) 2 Cavity preparation class II MOD (maxilla, mandible, molar), filling sandwich or composite 3 Extensive MOD cavity preparation and filling (maxilla or mandible, molar), filling sandwich or composite 4 Cavity preparation class II-type of simple and composite filling 5 Before completing the final fill temporary</p>



<p>c. Reconstruction of the tooth with cusp fracture 12. Sandwich technique a. indications b. closed and opened technique c. materials 13 Matrices and retainers - types and application, wedges 14. Biomechanics of teeth and materials 15. Composites and GI – clinical technique, material and teeth preparation, layer technique, adhesion, advantages and disadvantages 16. Dental materials – classification, advantages and disadvantages 17. Bonding agents – generations 18. Additional materials 18. Temporary materials - classification, advantages and disadvantages</p>			
9. Class II cavities , Class III, Composites			
<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>	



<ol style="list-style-type: none"> 1. Caries morphology of Class III 2. Steps of Class III cavities preparation <ol style="list-style-type: none"> a) Outline form and prevention of nearest tooth b) Conventional and adhesive cavity preparation for Class III c) factors determined cavity outline, resistance and retention shape d) adhesive preparation 3) Matrices and retainers - types and application, wedges, proximal point, tooth shape 4) Placement and removal technique for rubber dam 5) Composites – colors, optical properties of enamel and dentin, layer technique, consistency of materials, enamel and dentin colors 6) Finishing and polishing of restoration, occlusion, proximal point 7) Mistakes and after effects (proximal point – problems and its solutions, overhang, leakiness, occlusal mistakes 8) Enamel margin preparation 9) Dental cavities classification by Black and SiSta, steps of cavities preparation by modified Black's principles - revision 	<ol style="list-style-type: none"> 1. Ergonomic posture during operative procedures (distance between dentist eye and tooth) 2. Work in upper and lower arch (usage of dental mirror and positioning in upper and lower teeth) 3. Rubber dam application in posterior and anterior upper and lower teeth 4) Preparation and restoration Class III cavities by composite 5) Preparation and restoration Class III cavities by sandwich technique 	<ol style="list-style-type: none"> 1 Preparation and filling two cavities class III - simple and complex-(maxilla, mandible) 2 GI cement filling one for class III (maxilla or mandible) 3 Fill one loss in Class III open-sandwich method recommended canine 3 Name all stages of cavity preparation, cavity walls, tools 4 Before completing the final fill temporary
<p>10. 2 × Class III; 2 × Class IV</p>		



<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>
<p>1. Caries morphology of Class 4 cavities and post-traumatal injuries</p> <p>2. Steps of Class IV cavities preparation</p> <p>a) Outline form and protection of nearest tooth</p> <p>b) Conventional and adhesive cavity preparation for Class IV</p> <p>c) factors determined cavity outline, resistance and retention shape</p> <p>d) adhesive preparation, fractured dental crown bonding</p> <p>3) Matrices and retainers - types and application, wedges, proximal point, tooth shape</p> <p>4) Lining materials - clinical technique, materials</p> <p>5) Composites – colors, optical properties of enamel and dentin, layer technique, consistency of materials, enamel and dentin colors</p> <p>6) Finishing and polishing of restoration, occlusion, proximal point</p> <p>7) Mistakes and after effects (proximal point – problems and its solutions, overhang, leakiness, occlusal mistakes</p> <p>8) Loss of retention – causes, mistakes in bonding and etching, saliva contaminations,</p> <p>9) Dental cavities classification by Black and SiSta, steps of cavities preparation by modified Black`s principles - revision</p>	<p>1. Ergonomic posture during operative procedures (distance between dentist eye and tooth)</p> <p>2. Work in upper and lower arch (usage of dental mirror and positioning in upper and lower teeth)</p> <p>3. Explanation of factors influencing on outline, resistance and retention shape in cavity Class 4 preparation; cutting of enamel ridge – feathery and chamfer, one layered and multiple layered reconstruction</p>	<p>1. Preparation of 2 Class III cavities (maxilla and mandible) sandwich technique</p> <p>2. Preparation and restoration of 2 Class IV cavities using feathery and chamfer cutting of enamel ridge (incisors in maxilla)</p> <p>3.Preparation and restoration of 1 Class IV carious cavity</p> <p>4.Preparation and restoration of 1 Class IV fractured tooth</p> <p>5 Names of all steps of cavity preparation, walls and instruments</p>



11. 2× Class IV		
<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>
<p>1. Caries morphology of Class 4 cavities and post-traumatological injuries</p> <p>2. Steps of Class IV cavities preparation</p> <p>a) Outline form and protection of nearest tooth, fractured dental crown</p> <p>b) Conventional and adhesive cavity preparation for Class IV</p> <p>c) factors determined cavity outline, resistance and retention shape</p> <p>d) steps of cavity preparation, drills</p> <p>3) Matrices and retainers - types and application, wedges, proximal point, tooth shape</p> <p>5) Composites – colors, optical properties of enamel and dentin, layer technique, consistency of materials, enamel and dentin colors</p> <p>6) Finishing and polishing of restoration, occlusion, proximal point</p> <p>7) Mistakes and after effects (proximal point – problems and its solutions, overhang, leakiness, occlusal mistakes</p> <p>8) Loss of retention – causes, mistakes in bonding and acid-etching, saliva contaminations,</p> <p>9) Dental cavities classification by Black and Si/Sta, steps of cavities preparation by modified Black`s principles - revision</p>	<p>1. Ergonomic posture during operative procedures (distance between dentist eye and tooth)</p> <p>2. Work in upper and lower arch (usage of dental mirror and positioning in upper and lower teeth)</p> <p>3. Preparation of 1 Class IV cavities (cutting of enamel ridge – feathery and chamfer)</p>	<p>1. Preparation of 2 Class IV cavities (maxilla and mandible) sandwich technique</p> <p>2.Preparation and restoration of 1 Class IV carious cavity</p> <p>3.Preparation and restoration of 1 Class IV fractured tooth (one layered method)</p> <p>4. Names of all steps of cavity preparation, walls and instruments</p> <p>5. Before completing the final fill temporary</p>



12. Non-carious lesion, fractures		
<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>
<p>1. Noncarious lesions - types 2 Erosion, abrasions, abfraction - causes 3 Differentiation of hearing próchnicowymi a Black V- 4 Materials used for fillings dental hard tissue of noncarious lesion 5 Errors and limitations of the design and performance of hard tissue defects noncarious lesion 6 Acute and chronic fractures 7 The differences between Black IV and fractured teeth</p>	<p>1. Ergonomic posture during operative procedures (distance between dentist eye and tooth) 2. Work in upper and lower arch (usage of dental mirror and positioning in upper and lower teeth) 3. Preparation of noncarious lesions 4. Reconstruction of noncarious lesions. 5. Preparation of fractured anterior teeth, direct reconstruction</p>	<p>1 Preparation of two noncarious cavities . 2 Filling with composite, glass-ionomer cement and amalgam 3. Preparation of one front tooth crown fractures and fill method of direct composite</p>
13. Repertory about dental caries		
<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>
<p>1. Dental caries definition, etiopathology and clinical symptoms 2. Dental plaque; Role of saliva; Fluoride as a factor in reduced caries activity; Sugar; Time. 3) Dental cavities classification by Black and SiSta 4) Caries diagnosis. 5) Dental caries – microscopic and clinical manifestations; white spot, progression of carious lesions 5) Dental caries treatment; a. dental materials – classification b. permanent materials – composites, compomers, ormocers, amalgam, GI, applicable to specific types of cavities, composition, advantages, disadvantages 3. Temporary fillings- types, application, composition, advantages, disadvantages 4. Lining-types, application, defects, advantages, disadvantages - when we apply liner</p>	<p>1. Rubber dam 2. Diagnodent</p>	<p>1. Rubber dam 2. Matrices</p>



14. Credit of course. Test and essay		
<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>
<p><u>1. Test and essay of cariology</u></p> <p>2. Inlays, onlays</p> <p>a. Indications and contraindications</p> <p>b. Advantages and disadvantages</p> <p>c. Materials</p> <p>d. Preparation</p> <p>3. The rules of hygiene when working with a patient:</p> <p>a. Cross infection</p> <p>b. Desinfection and sterilization</p> <p>c. Conservation (dental unit, handpieces)</p> <p>d. The patient and the doctor as a potential source of infection</p> <p>e. Protection of dentist and patient</p>	<p>Preparation and construction of inlay (Class II, composite, direct restoration)</p> <p>CAD/CAM presentation</p>	<p>Preparation and construction of inlay (Class II, composite, direct restoration)</p> <p>CAD/CAM preparation</p>
15. Composites, Credit of course „Pre-clinical conservative dentistry” based on practical skill and theoretical knowledge		
<u>Introduction</u>	<u>Demonstration</u>	<u>Practical</u>
<p><u>1. Test of cariology - repetition</u></p>		<p>Credit of course</p> <p>- 14 carious lesions –preparation and restoration - including 2 x BL I (simple and complex), 4 x BI II (simple, complex, MOD, MOD), 2 x BI III-simple, complex, 2 x BI IV (including 1 fractured), 4 x BI V, 4 noncarious lesions, 1 fissure and sealing methods and PRR I and PRR II.</p>
Other		
Basic literature (list according to importance, no more than 3 items)		
<p>1. Sturdevant's art and science of operative dentistry / ed. Theodore M. Roberson, Harold O. Heymann, Edward J. Swift. - 6th ed.. - St. Louis : Mosby , 2012</p> <p>2. Kidd E.A.M. Smith B.G.N., Pickard H.M.: Picard`s Manual of operative dentistry.9. ed. Oxford Medical Publication 2011.</p>		



<p>3. Kidd E.A.M., Joyston-Bechal S. : Essentials of dental caries. 3 ed. Oxford University Press, O</p> <p>Additional literature and other materials (no more than 3 items)</p> <p>1.. Powers J.M., Wataha J.C. Dental Materials: Properties and Manipulation, Mosby 2012</p>
<p>Didactic resources requirements (e.g. laboratory, multimedia projector, other...)</p> <p>multimedia projector, phantoms (simulated patient), models, camera, a local computer network</p>
<p>Preliminary conditions (minimum requirements to be met by the student before starting the module/course)</p> <p>Student should know the anatomy and histology of teeth based on subjects from the 1 year.</p>
<p>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 met by the student to pass it and criteria for specific grades)</p> <p>Presence on seminars and classes in accordance with the rules of study and rules of procedures of the Department of Conservative Dentistry and Pedodontics. Admission for crediting is based on the implementation of certain procedures (that is: 14 cavities according to Black, and 4 cavities of non caries origin) and the positive evaluation of the oral response (debate, discussion, presentation) and test validation of knowledge.</p> <p>Preclinical dentistry is the part of the exam allowing student to exercise on clinical OSCE.</p>

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



Grade:	Criteria (examination evaluation criteria)
Very Good (5.0)	achievement of learning outcomes covering all relevant aspects
Good Plus (4.5)	achievement of learning outcomes covering all relevant aspects with some errors or inaccuracies
Good (4.0)	achievement of intended learning outcomes, with omitting some of the less important aspects
Satisfactory Plus (3.5)	achievement of intended learning outcomes, with omitting some important aspects or significant inaccuracies
Satisfactory (3.0)	achievement of intended learning outcomes, with omitting some important aspects or serious inaccuracies
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List of persons conducting specific classes				
Full name	Degree/scientific or professional title	Discipline	Performed profession	Form of classes
Michał Biały	BDS	Dentistry	Dentist	classes
Magdalena Wirzman	BDS	Dentistry	Dentist	seminars

Date of Syllabus development

23.09.2020

Syllabus developed by

...Magdalena Wirzman...



Signature of Head of teaching unit

Prof. Maciej Dobrzyński, PhD, DSc...

Signature of Faculty Dean

.....