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FACULTY OF STOMATOLOGY STUDY PROGRAM 0911.1 STOMATOLOGY CHAIR OF STOMATOLOGICAL PROPAEDEUTICS "PAVEL GODOROJA"

APPROVED

at the meeting of the Committee for Quality at the Council meeting of the Faculty of Assuarance and the evaluation of the Curriculum Stomatology

Faculty of Stomatology
Minutes No. 1 of 22.08.20 Committee President, Phd., DMS.,

Associate professor Stepco Elena

Minutes No. 2 of 30. Of. 2020

Dean of Faculty of Stomatology, Phd.; DMS., Associate professor,

APPROVED

Solomon Oleg

APPROVED

at the meeting of the chair of Stomatological Propaepedeutics "Pavel Godoroja"

Minutes No. 3 of 18.09.2020

Head of chair, Phd., DHMS, Associate professor Uncuta Diana

CURRICULUM

DISCIPLINE: PARTIAL REMOVABLE DENTURE TECHNOLOGY

Integrated studies

Type of course: Compulsory discipline

Chişinău, 2020



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I. PRELIMINARIES

• General presentation of the discipline: place and role of the discipline in the formation of specific competencies for profesional development program.

"Partial removable denture technology" is an indispensable part for the propaedeutics of prosthodontic dentistry and for modern dentistry.

The transition of students to clinical dentistry is performed by familiarizing them with the specifics of propaedeutics in prosthodontic dentistry. Basic steps include students' learning the methodology mentioned in this compartment which are oriented to develop a clinical thinking of students for establishment of diagnosis and treatment plan. Nevertheless, attention is paid to the odontotechnology of partial dentures in dentistry, as well as the basic steps in the execution of this dental construction. The latter is an important step in training of specialists. This discipline also includes the accumulated knowledge in the hechnology of removable dentures with distinction of the main clinical and laboratory steps that are mandatory for a prosthodontic doctor. The prosthodontic doctor behavior during the technique of partial removable dentures is the base for development of future specialists taking into account the principles of occlussion, jaw's biodynamics which are the fundamental basis of the removable prosthetics' technology in the dental field.

The aim (mission) of curriculum in professional training

The partial removable denture technology aim is to integrate the accumulated knowledge of future dental doctors gained during the dental disciplines, to provide a better, inoffensive and more efficient dental care with respecting the principles of construction, according to the special requirements. In the same time, the methods of modeling denture's wax pattern, the methods of packing, unpacking and other basic laboratory steps have the purpose to develop the skills and clinical thinking of students oriented to accumulation of competencies in determination of the optimal methods for diagnosis and treatment of the partial edentulous patients and the improvement of their life quality.

Discipline teaching languages: Romanian, Russian and English.

• *Beneficiaries*: 2nd year students, semester IV, Faculty of Stomatology.

II. DISCIPLINE ADMINISTRATION

Discipline code		S.04.O.039				
Discipline name		Partial removable denture technology				
Responsable for discipline		Bajurea Nicolae, Phd, DMS., Associate professor. Uncuţa Diana, Head of chair, Phd., DHMS., Associate professor				
Year	II	Semester	IV			
Total number of hours,	including:		150			
Lectures	17	Practical courses	17			



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Seminars	34	Individual work	82
Evaluation form	E	Number of credits	5

III. THE TRAINING OBJECTIVES OF THE DISCIPLINE

• At the level of understanding and knowledge:

- ✓ To know the role of the main components of the removable prosthesis with metallic framework;
- ✓ To get acquainted with the main and auxiliary elements of the removable prosthesis with metallic framework;
- ✓ To know the steps of the wax-up procedure of the metallic framework, making the preliminary model;
- ✓ To know the clinical aspects of the prosthetic field, the phases of the impression, the realization of the working casts;
- ✓ To have the components of the surveyor, to study the casts in the surveyor;
- ✓ To understand the steps of preparing the duplicate models;
- ✓ To know the modeling techniques of the wax pattern of the metallic component for the partial removable prosthesis with metallic framework;
- ✓ To know the modern techniques of impression, the methods of casting the alloys;
- ✓ To know the techniques of unpacking, machining, grinding and polishing the metallic component of partial removable prosthesis with metallic framework;
- ✓ To get acquainted with the parts of the partial removable prosthesis;
- ✓ To know the base's limits of the prosthesis, the anchoring elements, the technique of making the clasps from wire wipes;
- ✓ To know the technique of making occlusal bite rims;
- ✓ To know the methods to determine the occlusal registration;
- ✓ To get acquainted with the principles of placing the artificial teeth in the partial removable prosthesis;
- ✓ To know the evaluation criteria for wax pattern of the partial removable prosthesis;
- ✓ To know the stages of packing of the wax pattern of the partial removable prosthesis, of polymerization, the unpacking sequence and the methods of processing and polishing the prosthesis.

• Application level:

- ✓ To be able to distinguish the components of the partial removable prosthesis with metallic framework:
- ✓ To be able to distinguish the main and the auxiliary elements of the partial removable prosthesis with metallic framework;
- ✓ To be able to discern between the clinical and laboratory stages of the partial removable prosthesis with metallic framework, the elements of the prosthetic field, the preliminary models;
- ✓ To be able to analyze the aspects of the prosthetic field, the phases of functional impression of the prosthetic field, to make the cast of work;
- ✓ To be able to distinguish the components of the surveyor, to perform the study of the cast in a surveyor;
- ✓ To be able to perform the steps of preparing the duplicate casts;
- ✓ To be able to follow the modeling techniques for the wax pattern of the future metal component for partial removable prosthesis with metallic framework;
- ✓ To be able to carry out the modern techniques of impression, the methods of casting the alloys;
- ✓ To be able to carry out the techniques of unpacking, machining, grinding and polishing the metallic



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component of the partial removable prosthesis with metallic framework;

- ✓ To be able to distinguish the components of the partial removable prosthesis;
- ✓ To be able to draw the limits of the base of the prosthesis, the anchoring elements, to perform the technique of making the wipe wire clasps;
- ✓ To be able to make the occlusal rims patterns;
- ✓ To be able to determine the occlusal registration;
- ✓ To be able to carry out the principles of replacing the artificial teeth into the partial removable prosthesis;
- ✓ To be able to determine the criteria of evaluation of the wax pattern of the partial removable prosthesis;
- ✓ To be able to perform the packaging steps of the wax pattern of the partial removable prosthesis, the polymerization phases, the unpacking sequence and the polishing of prostheses;
- ✓ To be able to distinguish the clinical and laboratory stages of making, grinding and polishing injectable partial removable prosthesis.

Integration level:

- ✓ To possess the skills in knowing the elements of the partial removable prosthesis with metallic framework;
- ✓ To possess the skills in discerning the main and the auxiliary elements of the partial removable prosthesis with metallic framework;
- ✓ To possess the skills in knowing the clinical and technical stages of making the partial removable prosthesis with metallic framework, the elements of the prosthetic field, the preliminary casts;
- ✓ To possess the skills in knowing the clinical aspects of the prosthetic field, the stages of impression of the prosthetic field, to make the working cast;
- ✓ To possess the skills in distinguishing the components of the parallelograph, to perform the study of the model in a parallelograph;
- ✓ To possess the skills in following the steps of preparing the duplicate casts;
- ✓ To possess the skills following the modeling techniques for the wax pattern of the metal component for partial removable prosthesis with metallic framework;
- ✓ To possess the skills in to carrying out the modern techniques of printing, the methods of casting the alloys;
- ✓ To possess the skills in carrying out the techniques of unpacking, machining, grinding and polishing the metallic component of the partial removable with metallic framework;
- ✓ To possess the skills in distinguishing the components of the partial removable prosthesis;
- ✓ To possess the skills in drawing the limits of the base of the prosthesis, the anchoring elements, to perform the technique of making the wipe wire clasps;
- ✓ To possess the skills in making the occlusal rims patterns;
- ✓ To possess the skills in determining the occlusal registration;
- ✓ To possess the skills in carrying out the principles of replacing the artificial teeth into the partial removable prosthesis;
- ✓ To possess the skills in determining the criteria of evaluation of wax pattern of the partial removable prosthesis;
- ✓ To possess the skills in performing the packing steps of the wax pattern of the partial removable prosthesis, the polymerization phases, the unpacking sequence and the polishing of prostheses;
- ✓ To possess the skills in distinguishing the clinical and laboratory stages of making, the stages of the impression of prosthetic field and the particularities of the wax patterns, the techniques of packing, unpacking, machining, grinding and polishing the injectable partial removable prosthesis.



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IV. PRECONDITIONS AND EXIGENCIES

The partial removable denture technology is a unitary structural and functional complex which includes the following abilities. The knowledge of the components of the removable prosthesis with metallic framework. The familiarization with the main and the auxiliary elements of the removable prosthesis with metallic framework. The acquaintance with the clinical and technical stages of making the partial removable prosthesis with metallic framework. The ability to perform the preliminary model. The making of the working model. The recognition of the surveyor components. The observation of the models in the surveyor. Perceiving the stages of model preparation for duplication. Possession of techniques modeling the wax model of the metallic component for the partial removable prosthesis with metallic framework. Understanding the modern techniques of printing, casting alloys. Possessing the techniques for unpacking, machining, grinding and polishing the metallic part of the partial removable prosthesis with metallic framework. Knowledge of the parts of the partial acrylic removable prosthesis. The knowledge of the limits of the denture base, the anchoring elements, the clasps making techniques from wire wipe. The understanding of the technique in making the templates with occlusion wax rims. The knowledge of methods in determining the occlusal registration. Possessing the principles in mounting the artificial teeth in the partial removable prosthesis. The knowledge of the evaluation criteria for the sample of the partial removable prosthesis. The ability to perform the modeling steps of wax pattern, the polymerization, the unpacking and the polishing of the prosthesis. Familiarization with the clinical-laboratory steps in making the injectable partial removable prosthesis of prosthetic field impression, particularities of working wax patterns, injectable technique, grinding and polishing.

TOPICS AND ORIENTATIVE DISTRIBUTION OF HOURS

		Νι	ımber	of ho	urs
Nr. d/o	TOPICS		Sem i- nars	Pra- ctice	Indi vidu al
1.	Partial removable prosthesis with metallic framework. Elements of the prosthesis clasps. Artificial teeth, saddles, main connectors, secondary connectors, the elements of maintenance, support and stabilization. The definition of partial dentition. Methods of treatment with partial removable prosthesis with metallic framework. Techniques in obtaining the preliminary model. Classification of the partial dentition by Kennedy. Indications for prosthetic treatment with partial removable prosthesis with metallic framework. Advantages of the partial removable prosthesis with metallic framework. Disadvantages of the partial removable prosthesis with metallic framework.	1	2	1	5
2.	Elements of maintenance, support and stabilization. The main and auxiliary. The components of the partial removable prosthesis with metallic framework. The sockets of the partial removable prosthesis with metallic framework, characteristic. The connecting elements between the saddle, dimensions. Placing the link between the saddle on the prosthetic field. Secondary connectors, feature. The feature of the anchorages, maintenance, support and stabilization. Ackers Clasps, feature, indications. Hooks, Dried Roach, Feature, Directions.	1	2	1	5
3.	Clinical and technical stages of the partial removable prosthesis	1	2	1	5



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Nr.	TOPICS	Cour	Sem	Pra-	Indi
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		505	nars	cticc	al
	clasps. Preliminary impression of the prosthetic field. Realization				
	of the preliminary model.				
	Clinical and technical stages for manufacturing the partial removable				
	prosthesis with metallic framework. Materials used in the preliminary				
	impression of the prosthetic field. The sequence of preliminary impressions				
	of the prosthetic field. Preliminary model implementation technique.				
	Materials used to make the preliminary model.				
	Clinical aspects of the prosthetic field. Definitive or functional				
	impression. Making the casts. Test control.				
	What is prosthetic field and its characteristic in partial edentia depending on				
	the form of the edentia. The characteristic of the muco-bone support. The		2	1	5
	morphology of the crown's teeth. Materials used in functional impression of				
	the prosthetic field. Consequences of the functional impression. Materials used in making the final model. The technique of performing the definitive				
	model.				
	Surveyor. The study of the model on the surveyor. The metallic				
	components of the partial removable prosthesis with metallic framework.				
	The components of the surveyor. Definition: insertion and disassembly axle				
	after E.Gavrilov and after the USMF "N.Testemiţanu" school. Variations of				
	insertion axes and disinfection of the prosthesis. Free method of choice and				
	appreciation of average inclination of the pins of the teeth. Describe the		2	1	5
	method of fixing the chosen the position of the insertion. Definition: the		_	-	
	anatomical and prosthetic contour. Name the variations of topography of the				
	prosthetic contour. What are the areas that divide the tooth of the prosthetic				
	contour. For what purpose and by what methods the retention areas are				
	determined.				
	Preparing the duplicate model. Folding and duplicating the wax pattern.				
	Indicate the purpose of preparing the duplicate model. The equipment				
	required for preparing the duplicate model. The tools needed to prepare the				
	duplicate model. The materials used to prepare the duplicate model.		2	1	5
	Technology in preparing the functional duplicate model. The folding				
	technique in the retention areas. Areas that require folding at the upper jaw.				
	Areas that require jaw folding. Methods of modeling the duplicate.				
	Modeling the wax pattern of the metallic component.				
	The technique of modeling of the wax pattern partial removable prosthetic				
7	with metallic framework. Modeling technique.	1	2	1	5
7.	Partial removable prosthetic with metallic framework based using the	1		1	3
	calibrated wax method. Variety, composition and attributes of dental wax				
	used in modeling,				
	Techniques in making the metallic frame. Performing the printing.				
	Casting.				
	The characteristic of the alloys used to make the clasps' prosthesis. List the	1	2	1	5
	technological steps of obtaining the partial removable prosthetic with				
	metallic framework through casting. Methods of removing molded parts from				



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		Νι		of ho	urs		
Nr.	TOPICS	Cour	Sem	Pra-	Indi		
d/o	Torics	ses	i-	ctice	vidu		
		SCS	nars	CHCC	al		
	casting channels. Testing the wax pattern of the future metallic framework of						
	prosthesis.						
9.	Unpacking. Machining, grinding and polishing The metallic components. The partial removable prosthetic with metallic framework on the model. Test control. Unpacking techniques. Characteristic. Devices used for finishing the dentures. Tools used for working and polishing the denture. Materials used in processing and polishing the denture. Ultrasonic cleaning.	1	1	1	2		
10.	Partial removable prosthesis. Components. Definition of "partial edentia". The etiology. Classification of partial edentia by Kennedy. Elements of the partial edentulous prosthetic field. Characteristic. Directions to partial prosthetics therapy with partial removable prosthesis. Impressions. Criteria for classification the impressions. Impression trays. Varieties. Stages of anatomical impression. Impression materials. Classifications. Nominations. The technique of making the model for making partial removable prostheses. Requirements.	1	2	1	5		
11.	The limits of the denture base. Anchoring elements. The technique of making the wipe wire clasps. Characteristics of the partial removable prosthesis components. Artificial teeth, variety. Characteristics of the anchoring elements, retaining and stabilizing the partial removable prosthesis. Variations of wipe wire clasps used to make the partial removable dentures. Characteristic. The technique of making the cervico-occlusal clasps. Equipment, tools. Feature of special anchoring, holding and stabilizing systems used to make the partially acrylic removable prosthesis. Limits of the base of the partial removable prosthesis on the mandible. The limits of the partial removable prosthesis base to the maxilla. Draw the necessary lines for the installation of artificial teeth in the partial removable prosthesis. The criteria for choosing the artificial teeth for applying the anchoring, maintenance and stabilization elements. Clasps lines. Importance.	1	2	1	5		
12.	Making templates with occlusal rims for recording centric maxillomandibular relations. Dental wax and its varieties. Dental wax for making the template with occlusal borders. Composition. Arguments for the need of making the template with occlusal borders. Equipment, tools and materials needed to make the template with occlusion at the maxilla and jawbone. The dimensions of the occlusion edges to the maxilla. Requirements to the occlusion curve. The dimensions of the mandible occlusion. Requirements to the occlusion curve. Need and technique strengthening the template with occlusion curves in the maxilla and mandible. Requirement of the template with occlusion border on the maxilla and mandible.	1	2	1	5		
13.		1	2	1	5		
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d/o	TOPICS	Cour	i-		vidu
		ses	nars	ctice	al
	Determination of centric intermedia or centric occlusion relations. Simulators and molding of models. Test control. The notion of "occlusion". Varieties. Definition of "centric occlusion". Definition of "centric intermaxillary relations". Definition of "mandible posture". Method of determination. Definition of vertical occlusion. Methods of determination. The characteristic of the 3 clinical situations of centric occlusion or centric intermaxillary relations. Varieties of physiological and pathological occlusion. Characteristic. Simulators: Variety and principles underlying the structure. Components. Principles and methods of fixing the models in simulators.				
14.	Mounting the artificial teeth in the acrylic removable prosthesis. Artificial teeth, varieties, characteristic. Advantages and disadvantages of teeth made from acrylic. Advantages and disadvantages of porcelain teeth. Principles of choosing the artificial teeth for fitting into the partially acrylic removable prosthesis. General principles of fitting artificial teeth into the partial acrylic removable prosthesis to the mandible and maxilla. Rules in mounting the teeth in the partial acrylic removable prosthesis at the mandible; and maxilla. The machine, the tools needed to mount the teeth. Indications and artificial teeth fitting technique.	1	2	1	5
15.	Partial removable prosthesis layout sample. Final modeling. Arguments of the necessity to perform the partial prosthesis model and its consecutive. Equipment, tools and materials necessary for the final modeling of the partial prosthesis model. The technique of modeling the definitive part of the partial prosthesis layout and those requirements. The importance of definitive modeling of the partially acrylic removable prosthesis. Possible modeling errors. Final version of the acrylic partial mobilization motif.	1	2	1	4
16.	The technique of packaging the prosthesis layout. The polymerization. Unpacking. Processing and polishing the prosthesis. Methods of packaging the partial removable prosthesis. Characteristic. Materials for impression and techniques. Requirements to the wax pattern obtained. The technique of isolate the models and the necessary materials. Hot, light - acryl, and cure acryl. Composition. Destination. Techniques of introducing the acrylate in the flask. The polymerization cicle. Possible errors in polymerization. Unpacking technique of the partial denture. Unpacking tools, hints and technique used for the partial acrylic removable denture. Tools and materials used for of the partial acrylic removable prosthesis. Tools and materials used to grind the partial acrylic removable prosthesis. The equipment, tools and materials necessary for polishing the partial acrylic removable prosthesis. The technology of polishing the base of the partial acrylic removable prosthesis. The technology of polishing the denture's elements of the partial acrylic removable prosthesis. The composition of the polishing powder of the base of the prosthesis. Composition of the polishing	1	2	1	4



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		Νι	ımber	of ho	urs
Nr. d/o	TOPICS		Sem i- nars	Pra- ctice	Indi vidu al
	paste.				
17.	Partial removable injectable prosthesis. Test-control. Elements of partial edentulous prosthetic field. Characteristics of the anchoring, maintaining and stabilizing parts of the partially removable injectable prosthesis. Directions for partial dentition therapy with partial removable injectable prostheses. Impressions. Criteria for classifying the impressions. Impression spoons. Varieties. Stages of anatomical impressions. Impression materials. Classifications. The technique of making the model. Materials. Requirements to the model made for making the removable partial acrylic prosthesis. Component's characteristics of the partial removable injected prosthesis. Artificial teeth, variety. Varieties of acrilic used to make the partial removable injectable prosthesis. Characteristic Equipment, tools. Packaging techniques. Injection techniques. Mechanical processing and polishing the partial removable injectable removable prosthesis.	1	2	1	4
	Total	17	34	17	82

V. REFERENT OBJECTIVES AND CONTENT UNITES.

Objectives	Content units			
The technology of making the partial removable prosthesis with metallic framework.				
•	esis with metallic framework. Aspects of the			
prosthetic field.				
✓ to know the definition of partial dentition;	The notion of partial edentia			
✓ to know the components of the partial	Methods of treatment with the removable partial			
removable prosthesis with metallic	prostheses clasps.			
framework;	Techniques of obtaining the preliminary model.			
✓ to know the main and auxiliary elements of	Classification of the partial edentia by Kennedy.			
the removable partial prosthesis;	Indications for prosthetic treatment with partial			
✓ to know the clinical and technical stages of	removable prostheses.			
making the removable partial prosthesis	Advantages and disadvantages of partial			
with metallic framework, the stage of the	removable prosthesis with metallic framework.			
impression prosthetic field, the realization of	Clinical and technical stages of manufacturing the			
the preliminary model.	partial removable prosthesis with metallic			
✓ to know clinical and technical stages of	framework.			
manufacturing the partial removable				
prosthesis with metallic framework.				
Techniques for making the metallic framework of partial removable prosthesis. Surveyor.				
Components. Designing the metallic framework of partial removable prosthesis.				
✓ to know the components of the surveyor;				



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Objectives	Content units
✓ the study of the model in the surveyor.	The surveyor, the components.
✓ to know the stages of model preparation for	Definition: path of insertion by E.Gavrilov and by
duplication; to know the anatomo-	the USMF school
topographical peculiarities of the	"N.Testemiţanu". Variations of insertion axes and
temporomandibular joint;	disinsertion of the prosthesis. Free method of
✓ to know the techniques of modeling the wax	choice and the appreciation of the average
in the model of the metal component for	inclination of the teeth.
partial removable prosthesis with metallic	Describe the method path of insertion for
framework;	reproduction in surveyor.
✓ to know the modern techniques of realization	Definition: anatomical and prosthetic contourr.
the pattern, casting methods of alloys;	Knoe the topographical varieties of the prosthetic
✓ to know the techniques of unpacking,	equator.
machining, grinding and polishing the	In which areas is the tooth divided by the tooth
metallic component of the partial removable	contour.
prosthesis with metallic framework.	For what purpose and by what methods are the
	areas determined to be retentive.
	In what order is the design of the metallic framework of the partial removable prosthesis.
The technology of performing the partial re	1
The technology of performing the partial repartial removable prosthesis. Clinical aspects	
✓ to know the clinical aspects of the prosthetic	Elements of the partial prosthetic field.
field, phases of functional impression of	Indications for partial prosthesis therapy with
the prosthetic field, working model;	partial removable prostheses.
✓ to know the components of the partial	Impressions. Criteria for classifying the
removable prosthesis;	impressions.
✓ to know the limits of the denture base,	Impressions trays. Varieties. Anatomical steps of
anchoring elements, technique in making of	impression. The technique of making the model
wire clasps;	for partial removable prostheses. Requirements.
✓ to know the technique of making the	Equipment, tools and materials needed at
templates with occlusion rims;	making the template with occlusal rims at
✓ to know the methods of determining a	maxilla and mandible.
centric and middle intermaxillary relations	The dimensions of the occlusion rims at the
gyroplane mode in simulators;	maxilla.
✓ to know the principles of replace the	The dimensions of the mandible occlusion rims.
artificial teeth in the partial removal	Methods of packing the partial prosthesis layout.
prosthesis;	Characteristic. Partial denture's unpacking
✓ to know the stages of the model packaging, phases of polymerization, sequence	technique. The technology of polishing the base of the
of unpacking,	The technology of polishing the base of the partially removable acrylic prosthesis.
✓ to know processing methods and	The technique of polishing the prosthesis.
polishing the prosthesis.	The technique of polishing the prostilesis.
polishing the prostnesss.	1

Technology of performing the injectable partial removable prosthesis. Components of a injectable partial removable prosthesis. Aspects of the prosthetic field.

✓ to know the clinica	l aspects of the	
prosthetic field; steps	in performing the	Elements of the prosthetic field.
functional impression	n; working on the	Indications for partial prosthesis therapy with



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Objectives	Content units
realization of the model;	injectable partial removable prothesis.
✓ to know the components of the partially	Impressions. Criteria for classification
removable injected prosthesis;	impressions.
✓ to know the denture base's limits,	Impressions trays. Varieties.
anchorages;	Anatomical steps of impression. Imprinting
✓ to know the clinical and technical stages in	materials. The technique of making the model for
making the injectable removable prosthesis,	partial removable injectable prostheses.
the stages of the field impression, the	Requirements.
particularities of the realization working	Equipment, tools and materials needed at
patterns,	making the template with occlusal borders at
✓ to know the techniques of modeling the	maxilla and mandible.
wax model for removable injectable	The dimensions of the occlusion rims of the
prosthesis;	maxilla.
✓ to know the technique of making the	The dimensions of the mandible occlusion rims.
templates with occlusion rims;	Methods of packaging the injectable partial
✓ to know the methods of determining the	removable prosthesis. Characteristic.
centric and middle intermax relations	Injectable techniques. Acrylates. Varieties.
✓ to know the principles of fitting the	The printing and the technique's peculiarities.
artificial teeth in the removable injectable	Requirements of the obtained pattern.
prosthesis;	Partial denture's unpacking technique.
✓ to know the criteria of evaluation the	Technology of processing the base of the partial
sample model of the implanted removable	removable injectable prosthesis
prosthesis; ✓ to know the stages of the model packaging.	The technique of polishing the partial removable
	injectable prosthesis.
the phases of injection, consecutivity of unpacking,	
to know the techniques of unpacking,	
mechanical machining of the removable	
injectable prosthesis;	
to know the methods of processing and	
polishing the injectable partial removable	
position injectation partial reliio (able	

VI. PROFESSIONAL SPECIFIC (PS) AND TRANSVERSAL COMPETENCES (TC) AND STUDY OUTCOMES

Professional competencies specific (PCS)

prosthesis.

SC1: Knowing the notion of partial edentia; components of the parial removable prosthesis with metallic framework; of the main and auxiliary elements of the parial removable prosthesis with metallic framework, the steps of taking an impression, make a model.

SC2: Knowing the placement of the link between the saddle on the prosthetic field, the secondary connectors, the features of anchoring, holding, support and stabilizing elements, Ackers, Roach clasps, indications.

SC3: Knowing the components of the surveyor, path of insertion by E. Gavrilov and by USMF "N.Testemiţanu" school, the free choice method, and the appreciation of the average inclination of the teeth, the topography the anatomical and prosthetic contour, the areas that divide the prosthetic contour,



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the purpose, and by what methods is determined the retention area, the order of drawing on the prosthesis metallic framework.

SC4: Knowing the purpose of preparing the model for duplication, the equipment needed for preparing the duplicated model, the necessary tools for preparing the duplicated model, the technique of determining the retention areas.

SC5: Knowing the parts of the partial removable prothesis with clasps, characteristics of the anchors, retaining and stabilizing the partial removable prosthesis, the wipe wire clasps used to make the partial removable prosthesis, the necessary lines for the fitting of artificial teeth into the partial removable prosthesis, the criteria of choosing the tooth pillars for the application of the anchoring, retaining and stabilizing elements, clasps lines.

SC6: Knowing the elements of partial prosthetic, indications for therapy in partial edentation therapy For partial injectable partial removable prostheses, criteria of the impression classification, impression trays, anatomical impressions, modeling technique, model requirements made for the manufacture of partial removable prostheses, artificial teeth varieties, the clinical and technical stages of making the injectable partial removable prostheses.

Transverse competencies (skills) (TC)

TC1: Applying professional assessment standards, acting according to professional ethics, as well as respecting the legislation in force. Promoting logical reasoning, practical applicability, assessment and self-assessment in decision-making.

TC2: Performing activities and exercising the specific roles to teamwork within the chair of propedeutic dentistry. Promoting the spirit of initiative, dialogue, cooperation, positive attitude and respect for others, empathy, altruism and continuous improvement of their own activities;

TC3: Systematically assessing of personal skills, of the role and expectations, applying self-assessments for learned processes, acquired skills and professionalism needs, effective use of language skills, knowledge in informational technologies, research and communication skills, in order to provide qualified services and adaptation to the dynamics of health policy requirements and personal and professional development.

Study finalizations

At the end of the course, the student will be able to:

- to know the clinical and technical stages of the partial removable prosthesis with metallic framework, the stages of the imprinting the prosthetic field, the preliminary model;
- to know the components of the surveyor, to study a model in the surveyor;
- to know the stages of preparing the duplicate model;
- to know the techniques of unpacking, machining, sanding and polishing the metallic component of the partial removable prosthesis with metallic framework;
- to know the elements of the partial removable prosthesis;
- to know the principles of artificial teeth mounting in the partial removable prosthesis;
- to know the stages of packing of the model, the stages of polymerization, the unpacking sequence,
 - methods of processing and polishing the prosthesis;
- to know the clinical and technical stages of making the injectable partial removable prosthesis,
- the stages of the prosthetic field, the particularities of the wax patterns, etc.

VIII.STUDENT'S SELF-TRAINING

Nr	Expected	Implementation strategies	Assessment criteria	Implementation
111.	product	implementation strategies	Assessment enterta	terms



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Nr.	Expected product	Implementation strategies	Assessment criteria	Implementation terms
1.	informational sources	Reading the lecture or the material in the manual on the subject. Reflecting on the topic in the questions. Knowing and selecting additional information sources on the topic. Reading the text carefully and describe the essential content. Wording of generalizations and conclusions regarding the importance of the theme / subject.	The ability to extract the essentials. Interpretative skills. The ability to analyze and communicate the material accumulated on its own.	During the semester
2.	Solving case problems	Solving case problems, with argumentation of conclusions at the end of each practical lessons. Verification of the finalities and appreciation of their achievement. Selection of additional information, using electronic addresses and additional bibliography.	The quality of solving problems of situation and clinical case, the ability to formulate and interpret clinical and paraclinical data. Ability to analyze selected information from national and international professional websites.	During the semester
3.	Appreciation of indications for radiographic examination	The student should study the peculiarities of making the removable prostheses and convince himself about the need for knowledge of each type of removable prosthesis.	Assessing the accuracy of the information described by the student.	During the semester
4.	Preparing the project	Students will prepare information on the selected topic from the Thematic Plan with schematic and graphics rendering in Power Point.	Evaluation of the quality of the selected material, the design of the project and the ability to reproduce the information.	During the semester

VII.METHODOLOGICAL SUGGESTIONS FOR TEACHING-LEARNING-ASSESSMENT

✓ Teaching and learning methods used

In the teaching process of the discipline "partial removable denture technology" different teaching methods are used, oriented towards the efficient acquisition and achievement of the objectives of the didactic process. The course provides lectures, seminars, practical works and individual work. Courses are held in the third semester by the <u>course owner</u> (titular). The following forms of training are used in the practical work: frontal, individual activity, brainstorming sessions, group discussions, case studies in community pharmacies,



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case study. As a teaching aid, the specialized manuals are available in the university library, the methodological recommendations of the department's staff, tables, schemes, information sources in electronic format, national and international professional websites, etc. are available. Students receive individual assignments that are presented for group discussions, which subsequently assess the quality of individual work and practical skills. In order to acquire the didactic material and teambuilding, during the semester the students perform a miniresearch in the field, the results of which are presented at the seminars and practical lessons organized in the last month of the semester.

Recommended *learning* methods are: *learning* theoretical *material* after lecture and manual; *observation* - identifying the characteristic features of doctor-patient communication; *analysis* - in the use of clinical and paraclinical examination methods of patients, as well as methods and stages of prevention, asepsis and antisepsis; *comparison* - analysis by comparison of the methods of collecting the anamnesis, of the paraclinical examination methods according to their advantages and disadvantages; *elaboration of the algorithm* - selection of the mandatory elements and elaboration of the patient consultation algorithm; *modeling* - identifying and selecting the elements necessary for modeling the situations when consulting patients, formulating the conclusions, argumentation and making the final decision.

✓ **Applied teaching strategies / technologies** (specific to the discipline)

Face-to-face, individual, brainstorming, group discussion, clinical case analysis, teambuilding, clinical exam simulation, mini-research, comparative analysis.

✓ *Methods of assessment* (including the method of final mark calculation)

Current: Current checks during seminars and practical lessons, 4 test controls in writing. For the individual work done during the semester, the student is evaluated, the grade being included in totals. At the end of the semester, based on the grades from the totals, the average annual score is calculated.

Final: The course ends with an exam. The note at the exams of the annual average calculated at the end of the study discipline - 50%; the test-control - 20% and the oral interview - 30%. The annual average grade and the grades of all stages of final examination (test and oral answer) – are expressed in numbers according to the rating scale (see table) and the final mark awarded is expressed in a number with two decimal places, which will be passed in the student's record book.



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Method of mark rounding at different assessment stages

Intermediate marks scale (annual average and mark at the colloquium differentiated)	National Assessment System	ECTS Equivalent	
1,00-3,00	2	F	
3,01-4,99	4	FX	
5,00	5		
5,01-5,50	5,5	E	
5,51-6,00	6		
6,01-6,50	6,5	n	
6,51-7,00	7	D	
7,01-7,50	7,5	C	
7,51-8,00	8		
8,01-8,50	8,5	D	
8,51-8,00	9	В	
9,01-9,50	9,5	A	
9,51-10,0	10		

Note: Absence on colloquium differentiated without good reason is recorded as "absent" and is equivalent to 0 (zero). The student has the right to have two re-examinations.

VIII. X.RECOMMENDED LITERATURE:

A. Compulsory:

- 1. Lecture materials.
- 2. V. Nicolae Proteza scheletată în reabilitarea edentației parțiale. Ediția a II-a revizuită și adăugită. Sibiu, 2008, pag. 11-269.
- 3. Tony Jonson, David G.Patrick, Christopher W.Stokes, David G. Wildgoose and Duncan J. Wood Basics of Dental Technology: A Step by Step Approach, SUA, 2012, pag. 65-77.
- 4. I. Postolachi Protetica dentară. Chişinău, 1993, pag. 193-274.
- 5. В. Н. Трезубов, А. С. Щербаков, Л. М. Мишнев. Ортопедическая стоматология, Санкт-Петербург, 2002, стр. 215-280.

B. Additional

- 6. V. Nicolae, Norina Forna, Gabriela Ifteni. Clinica și terapia edentației parțiale intercalate reduse. Editura Apollonia- Iași, 2001, pag.367.
- 7. Лебеденко И. Ю., Перегудов А. Б., Глебова Т. Э., Лебеденко А. И. Телескопические и замковые крепления зубных протезов, Москва 2002, стр. 697.