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**Federal State Autonomous Educational Institution of Higher Education
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA
NAMED AFTER PATRICE LUMUMBA
RUDN University
Institute of Medicine**

educational division (faculty/institute/academy) as higher education programme developer

COURSE SYLLABUS

Gnathology and Temporo-Mandibular Joint's Functional Diagnostics

course title

Recommended by the Didactic Council for the Education Field of:

31.05.03 Dentistry

field of studies / speciality code and title

The course instruction is implemented within the professional education programme of higher education:

Dentistry

higher education programme profile/specialisation title

1. COURSE GOAL(s)

The goal of the course «Gnathology and functional diagnostics of temporomandibular joint» is to train a dentist enable to diagnose and plan the orthopedic stage of complex treatment of patients with the diseases of the temporomandibular joint, considering the individual characteristics of the disease and the patient's age.

2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course (module) «Gnathology and Temporo-Mandibular Joint's Functional Diagnostics» is aimed at the development of the following competences /competences in part: (GC)-1, (GPC)-5, 6, (PC)- 1,2,6.

Table 2.1. List of competences that students acquire through the course study

Competence code	Competence descriptor	Competence formation indicators (within this course)
GC-1	Being able to implement critical analysis of problem situations based on systems approach, develop an action strategy.	GC-1.1. Analyzing the problem situation as a system identifying its components and links between them.
GPC 5	Being able to examine patients to determine a diagnosis when solving professional tasks	GPC-5.1. Gathering anamnesis by analyzing the patient's complaints, making a physical examination at a dental appointment.
		GPC-5.2. Formulating a preliminary diagnosis and drawing up a plan for laboratory and instrumental examination of a dental patient.
		GPC-5.3. Compiling medical documentation for a dental patient in accordance with regulatory requirements.
		GPC-5.8. Conducting differential diagnosis with other diseases/conditions, including the urgent ones.
		GPC-5.9. Making a diagnosis based on the current international statistical classification of diseases and health problems.
GPC-6	GPC 6 Being able to prescribe non-drug and drug treatment, monitor its efficacy and safety when solving professional tasks	GPC-6.1. Developing a plan for dental disease treatment taking into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the medical care standards.
		GPC-6.2. Selecting medical products (including dental materials) for drawing up a

Competence code	Competence descriptor	Competence formation indicators (within this course)
		comprehensive plan for dental disease treatment. Following up the treatment of a patient.
PC-1	PC-1. Being able to make an examination of a patient in order to determine a diagnosis.	PC-1.1. Making an initial examination and/or reexamination of a patient in order to make a preliminary diagnosis.
		PC-1.2. Receiving information from patients (their relatives/legal representatives); conducting a questionnaire survey of patients regarding their general health status; identifying concomitant diseases in order to make a preliminary diagnosis.
		PC-1.3. Detecting if patients have dentoalveolar, facial anomalies, deformities and prerequisites for their development, defects in the crowns of teeth and dentition on the basis of the patient examination; laboratory, instrumental, and additional examinations in order to make a preliminary/final diagnosis.
		PC-1.4. Detecting if patients have risk factors for oncopathology (including various background processes, precancerous conditions) based on laboratory, instrumental and additional examinations in order to make a preliminary/final diagnosis.
		PC-1.5. Making a preliminary/final diagnosis based on the patient examination; laboratory and instrumental examinations.
PC-2	PC-2. Being able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	PC-2.6. Providing orthopedic treatment for persons with defects in teeth, dentition within the temporization procedure, rehabilitation of single defects in the dentition, dental prostheses of up to three units (excluding dental implants prosthetics), partial and complete removable laminar denture using modern treatment methods approved for use in medical practice.
PC-6	PC-6. Being able to analyze and present in public medical information based on evidence-based medicine, participate in scientific	PC-6.1. Searching for medical information based on evidence-based medicine, interpreting data from scientific publications and/or preparing a presentation to make medical information, the results of scientific research public.

Competence code	Competence descriptor	Competence formation indicators (within this course)
	research, introduce new methods and techniques aimed at protecting public health	

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course refers to the core/variable/elective* component of (B1) block of the higher educational programme curriculum.

* - Underline whatever applicable.

Within the higher education programme students also master other (modules) and / or internships that contribute to the achievement of the expected learning outcomes as results of the course study.

Table 3.1. The list of the higher education programme components/disciplines that contribute to the achievement of the expected learning outcomes as the course study results

Competence code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
CC1	Being able to implement critical analysis of problem situations based on systems approach, develop an action strategy.	Dentistry" (simple prosthetics) Prosthodontics of edentulous patient Prosthodontics (Complex Prosthetics)	Maxillofacial prosthetics
GPC 5	Being able to examine patients to determine a diagnosis when solving professional tasks	Cariology and the disease of hard dental tissues. "Dentistry" (simple prosthetics) Prosthodontics of edentulous patient Prosthodontics (Complex Prosthetics)	Maxillofacial prosthetics
GPC 6	Being able to prescribe non-drug and drug treatment, monitor its efficacy and safety when solving professional tasks	Cariology and the disease of hard dental tissues. "Dentistry" (simple prosthetics) Prosthodontics of edentulous patient Prosthodontics (Complex Prosthetics)	Maxillofacial prosthetics
PC 1	Being able to make an examination of a patient in order to determine a diagnosis	Cariology and the disease of hard dental tissues. "Dentistry" (simple prosthetics) Prosthodontics of edentulous patient Prosthodontics	Maxillofacial prosthetics

		(Complex Prosthetics)	
PC 2	Being able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	Cariology and the disease of hard dental tissues. "Dentistry" (simple prosthetics) Prosthodontics of edentulous patient Prosthodontics (Complex Prosthetics)	Maxillofacial prosthetics
PC 6	Being able to analyze and present in public medical information based on evidence-based medicine, participate in scientific research, introduce new methods and techniques aimed at protecting public health	Cariology and the disease of hard dental tissues. "Dentistry" (simple prosthetics) Prosthodontics of edentulous patient Prosthodontics (Complex Prosthetics)	Maxillofacial prosthetics

* To be filled in according to the competence matrix of the higher education programme.

4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course "**Gnathology and Temporo-Mandibular Joint's Functional Diagnostics**" is 2 credits (72 academic hours).

Table 4.1. Types of academic activities during the periods of higher education programme mastering

Type of academic activities		Total academic hours	Semesters/training modules
			10
<i>Contact academic hours</i>		<i>51</i>	<i>51</i>
<i>including:</i>			
Lectures (LC)			
Lab work (LW)		51	51
Seminars (workshops/tutorials) (S)			
<i>Self-studies</i>		<i>18</i>	<i>18</i>
<i>Evaluation and assessment (exam/passing/failing grade)</i>		<i>3</i>	<i>3</i>
Course workload	academic hours	72	72
	credits	2	2

* To be filled in regarding the higher education programme correspondence training mode.

5. COURSE CONTENTS

Table 5.1. Course contents and academic activities types

Course module title	Course module contents (topics)	Academic activities types
Section 1. Fundamentals of clinical gnathology (biomechanics of the dentition system). Morpho functional analysis in gnathology.	Topic 1.1. Fundamentals of clinical gnathology. Morphological and functional elements of the temporomandibular joint. Biomechanics of the masticatory apparatus. The occluders and articulators, face-bows. Methods of installing models in the articulator and adjusting it to the individual function of the patient.	LR
	Topic 1.2. Occlusography. Occlusal markers: spray, paper, foil. Computer-based methods.	
	Topic 1.3. Digital methods. Axiography and functiography, diagnostic value. Computer methods of diagnostics of dentition.	
Section 2. Diagnostics of pathology of the temporomandibular joint and masticatory muscles	Topic 2.1. Etiology, clinic, pathogenesis of TMJ diseases. Classification of TMJ diseases requiring prosthetic treatment. Functional state of the chewing and speech apparatus in TMJ diseases, hardware methods for examining patients with TMJ diseases. Differential diagnosis.	LR
	Topic 2.2. Clinical methods for diagnosing musculo-articular dysfunction	

	Topic 2.3. The functional state of the masticatory-speech apparatus in TMJ diseases, hardware methods for examining patients with TMJ diseases. Differential Diagnosis	
Section 3. Prosthetic treatment of patients with pathology of the temporomandibular joint and masticatory muscles	Topic 3.1. Basic principles of complex treatment of patients with diseases of the temporomandibular joint and masticatory muscles. Medical and diagnostic devices. The types of occlusal splints.	LR
	Topic 3.2 Tactics of management of patients with pathology of occlusion, TMJ, masticatory muscles. Stages of complex treatment.	

* - to be filled in only for **full**-time training: *LC* - lectures; *LW* - lab work; *S* - seminars.

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Classroom equipment and technology support requirements

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
Lecture	An auditorium for lecture-type classes, equipped with a set of specialized furniture; board (screen) and technical means of multimedia presentations.	

Lab-work №1	An auditorium for laboratory work, individual consultations, current control and intermediate certification, equipped with a set of specialized furniture: a double student desk -13, a chair for a teacher, a metal cabinet for storing equipment, a built-in cabinet for materials and tools -6 pcs, a sink, a mobile a trash can with a lid of at least 200 liters, a glass cabinet for visual aids, a four-section metal safe for storing tips and burs. Technical means used to present educational information: LCD panel, personal computer-monoblock, video camera on a tripod, sets of educational and visual aids (types of dentures), radiographs of MRI and CBCT images on paper and on CD, providing thematic illustrations.	<i>Specialized educational/laboratory equipment and materials:</i> Face bows- 7 Axiograph - 1 Functionograph -1 T-scan- 1 Occlusion -1 Hardware complex Biopak - 1 Apparatus for light curing of spoons 1 Stands with types of splints and dentures. <i>Tools and materials:</i> Disposable examination kits 1 per student Examination card form for TMJ pathology - 1 per student Diagnostic models with various defects of teeth and dentition - 14 sets. Samples of occlusal splints and denture splints - 14 sets Silicone base impression material 900 g per group Plates for individual spoons light-cured -2 per group Occlusal markers - 1 set per group
Lab-work	An auditorium for laboratory work, individual consultations, current control and intermediate certification, equipped with a set of specialized furniture and equipment:	<i>Specialized educational/laboratory equipment and materials:</i>

15 sets of specialized furniture - tables for simulators and dental simulators "Saratoga S.p.a" (body made of steel, painted with powder enamel, countertop made of artificial stone, table lamp, Philips monitor, retractable blocks of the doctor [2 M4 turbine hoses] and assistant [multifunctional pistol, saliva ejector, vacuum cleaner], multifunctional pedal, Venturi aspiration system with a centralized electric pump, FRASAKO dental phantoms (Germany) on a minitorso with an articulator, models of the upper and lower jaws of the ChVN 28 type (Zarnitsa, Russia) with a face mask and pneumatic or mechanical adjustment position of the phantom along 2 axes in the form of a long table for 12 vis-a-vis places and 2 four-seat modules in the form of a "chamomile" Wooden chair with a back on wheels for a dental technician - 20 pcs.

Special sink made of stainless steel with two sinks and a gypsum trap.

Gypsum tables for 14 jobs.

Mobile with a cover a tank for garbage on 250 liters.

Dental chair with a lamp and Frasako phantom chair with an articulator, models of the upper and lower jaws of the ChVN 28 type (Zarnitsa, Russia) with a face mask and mechanical adjustment of the position of the phantom along 2 axes. Wall screen and multimedia projector Epson.

Dell LCD panel with a diagonal of at least 120 cm.

- Portable vibrating table - 4.
- Trimmer -1.
- Vacuum plaster mixer - 1.
- Scales for plaster - 1
- Steam-jet apparatus for cleaning dentures - 1.
- Vacuumformer-1.
- Occluders -14 pcs.
- Adjustable articulators - 7 pieces.
- Face bows- 7

Tools and materials:

- Spatulas for gypsum -14
- Silicone flasks for mixing gypsum-14,
- Knife for plaster - 14
- Dental spatula - 14 pcs.
- Impression trays number 3 for the upper and lower jaws, metal perforated by 14.
- Vacuum former plates – 1 for a student
- Alginate mass 200 g per student
- Plaster 2nd class 250 g per student
- Supergypsum – 50 g per student
- Articulating paper 100 microns thick - 2 sheets per student C-silicone for occlusion registers – set 900 grams basic
- Scissors for cutting molded mouthguards - 14

Seminar	An auditorium for conducting seminar-type classes, group and individual consultations, current control and intermediate certification, equipped with a set of specialized furniture and technical means for multimedia presentations.	List of specialized equipment, stands, visual posters, etc.
Computer classroom	A computer class for conducting classes, group and individual consultations, current control and intermediate certification, equipped with personal computers (in the amount of __15__ pcs.), a board (screen) and technical means of multimedia presentations.	Software: • Microsoft Office: PowerPoint, Word
Self-studies	An auditorium for independent work of students (can be used for seminars and consultations), equipped with a set of specialized furniture and computers with access to the EIOS.	

7. RESOURCES RECOMMENDED FOR COURSE STUDY

Main readings:

1. Orthopedic dentistry: textbook / S.D. Arutyunov, E.A. Bragin, S.I. Burlutskaya [and others]; edited by E.S. Kalivradzhiyan, I.Yu. Lebedenko, E.A. Bragina, I.P. Ryzhova. - 3rd ed., revised. and additional - M. : GEOTAR-Media, 2020. - 800 p. : ill. - ISBN 978-5-9704-5272-1 : 2200.00.
2. Technology of dental and jaw prosthetics [Text]: a guide for practical exercises / V. N. Trezubov, E. A. Bulycheva, S. D. Arutyunov. - Moscow: Practical Medicine, 2020. - 167 p. : ill., tsv. ill. ; 25 cm. - Bibliography: p. 167 (10 titles). - 500 copies. - ISBN 978-5-98811-582-3 (in translation) A guide to practical exercises on prosthetics of the dentition (complex prosthetics) [Text]: Textbook / I.Yu. Lebedenko [and others]; Ed. I.Yu. Lebedenko. - M.: Practical medicine, 2014. - 408 p. - ISBN 978-5-98811-291-4: 465.00.
3. Guide to practical exercises in prosthetic dentistry for students of the 5th year / edited by Lebedenko I. Yu., Ericheva V. V., Markova B. P. / (Authors: Arutyunov S. D. and others) Educational allowance. - M. : Practical medicine 2012. (Part III. - 512 p.). ISBN: 978-5-98811-046-0
4. Lebedenko Igor Yulievich. Functional and instrumental research methods in orthopedic dentistry [Text]: Textbook for universities / I.Yu. Lebedenko, T.I. Ibragimov, A.N. Ryakhovsky. - M. : Medical Information Agency, 2003. - 128 p. : ill. - ISBN 5-89481-135-X : 260.00.
5. Occlusion. Articulation. Biomechanics in the practice of orthopedic dentistry [Electronic resource]: Teaching aid / Comp. V.S. Bulgakov, S.N. Razumova. - M. : Publishing House of RUDN University, 2009. - 35 p. - ISBN 978-5-209-03385-1 : 0.00.

Additional readings:

1. Examination of the patient in the clinic of orthopedic dentistry. Tests [Text]: Teaching aid / RUDN University; Comp. V.S. Bulgakov, Sh.Kh. Sahakyan. - M. : Publishing House of RUDN University, 2007. - 20 p.
2. Bulgakov V.S. Craniomandibular pain in the clinic of orthopedic dentistry: clinic, diagnosis, treatment [text] / V.S. Bulgakov, Kh.S. Shokokat, S.N. Razumova // Bulletin of the Peoples' Friendship University of Russia: Medicine. - 2011. - No. 3. - S. 131-135.

Resources of the information and telecommunications network "Internet":

1. RUDN ELS and third-party ELS, to which university students have access based on concluded agreements:

- RUDN Electronic Library System - RUDN EBS <http://lib.rudn.ru/MegaPro/Web>
- ELS "University Library Online" <http://www.biblioclub.ru>
- EBS Yurayt <http://www.biblio-online.ru>
- ELS "Student Consultant" www.studentlibrary.ru
- EBS "Lan" <http://e.lanbook.com/>
- EBS "Trinity Bridge"

2. Databases and search engines:

- electronic fund of legal and normative-technical documentation <http://docs.cntd.ru/>
- Yandex search engine <https://www.yandex.ru/>
- Google search engine <https://www.google.ru/>
- abstract database SCOPUS <http://www.elsevierscience.ru/products/scopus/>

Educational and methodological materials for independent work of students in the development of the discipline of the discipline "Gnathology and functional diagnostics of the temporomandibular joint":

1. Electronic versions of textbooks

2. Presentations on the topics of the classes

3. Video materials

posted in accordance with the current procedure on the discipline page in TUIS!

1. A course of lectures on the discipline "_____".

2. Laboratory workshop on the discipline "_____" (in the presence of laboratory work).

3. Guidelines for the implementation and execution of a term paper / project in the discipline "_____" (if there is a CG / CP).

4.

* - all educational and methodological materials for independent work of students are placed in accordance with the current procedure on the page of the discipline in TUIS!

8. ASSESSMENT TOOLKIT AND GRADING SYSTEM* FOR EVALUATION OF STUDENTS' COMPETENCES LEVEL UPON COURSE COMPLETION

The assessment toolkit and the grading system* to evaluate the competences formation level (GC-1; GPC-5, 6; PC-1,2,6) upon the course study completion are specified in the Appendix to the course syllabus.

* The assessment toolkit and the grading system are formed on the basis of the requirements of the relevant local normative act of RUDN University (regulations / order).

DEVELOPERS:

Professor of the
Department
of prosthetic dentistry

Bykova M. V.

position, department

signature

name and surname

Professor of the
Department
of prosthetic dentistry

position, department

signature

Parunov V.A.

name and surname

HEAD OF EDUCATIONAL DEPARTMENT:

Professor, Head of the
department of

Prosthetic dentistry

name of department

signature

Lebedenko I. Yu.

name and surname

**HEAD
OF HIGHER EDUCATION PROGRAMME:**

Deputy Director of medical
institute for academic affairs

position, department

signature

Razumova S.N.

name and surname

Appendix №1

to the discipline “Gnathology and diagnostics of temporomandibular joint”

Fund of assessment tools for carrying out the intermediate certification for the discipline (module)

Table № 1.

Assessment tools	Quantity
Control questions	31
Tasks in the test form	53
Case study	10

Standard control tasks or other materials necessary for the assessment of knowledge and skills that characterize the stages of the formation of competencies

Tasks in the test form (example) (PC 2, 5, 6, 8, 9)

1. The articular head of the temporomandibular joint has:
 - 1) a spherical shape
 - 2) an elliptical shape *
 - 3) a trapezoidal shape
 - 4) an oval shape
2. The TMJ disc is composed of:
 - 1) fibrous connective tissue *
 - 2) hyaline cartilage
 - 3) epithelial tissue
 - 4) bone base and fibrous tissue
3. Normally the articular head of the TMJ, making excursions, transmits chewing pressure through the articular disc to the:
 - 1) posterior wall of the articular fossa
 - 2) articular disc
 - 3) articular tubercle *
 - 4) pinnacle of the articular tubercle

12. 1. 2. Case studies (example) (GPC 1, 5, PC 1,2, 6)

Case study №1

Main part

Patient B. 58 years old turned to the dentist with complaints of poor aesthetics of the frontal group of teeth, increased sensitivity of teeth from thermal stimuli, difficulty chewing food, pain and clicking in the left TMJ when opening and closing the mouth.

Perennia and associated diseases: osteochondrosis.

Anamnesis of the disease: teeth removed because of caries and its complications. Over the past 5 years, much erased the remaining teeth. Slonje and pain in the left TMJ were noted for 2 years.

Data of objective research, external examination:

nasolabial and chin folds are expressed, the corners of the mouth are lowered. Reducing the height of the lower face by 7 mm.

Identified crunch and clicks in the left TMJ when opening and closing the mouth.

Objectively: there is an Erasure-shortening of teeth 1.1, 2.1, 2.2, 2.3 by 2/3 of the height of crowns, teeth 1.4, 1.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.5, 4.7 1/3-1/2 the height of the crown.

Tooth 3.7 - a large part of the crown is restored with a filling material, the tooth changed color (brownish shade), IRAPS > 0.7.

Condition of the oral mucosa, gums, alveolar processes and palate:

the gums are hyperemic, edematous, and bleeding is noted during probing.

In the area of the canines and premolars of the upper and lower jaws, a recession of the gums is noted.



Questions:

1. Make a preliminary diagnosis.
2. Determine the need for additional examination methods.
3. Make a plan of surgical treatment without implantation.
4. Make a plan of orthopedic treatment without implantation.
5. What will be the rehabilitation and prophylactic stage in this patient?

Case study № 2

Main part

Patient A. 56 years old appealed to the clinic with complaints of poor aesthetics, difficult chewing food.

Anamnesis of the disease: according to the patient, prosthetics was carried out for 15 years backward. The last visit to the dentist-3 years ago-all crowns were removed.

External examination: decrease in the height of the lower part of the face by 4 mm, expressed nasolabial folds, senile expression, opening the mouth in full volume, without deviation from the midline.

The examination of the oral cavity:

Dental formula:

○	Π	Π	○	○	○	Π	Π	Π	R, Pt	Π	○	Π	○	○	○
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
○	○	○	Π	Π	Π	Π	Π	Π	○	Π	○	Π	○	Π	○

The mucous membrane is pale pink, moderately moist, without visible pathological change.

Tooth 1.2 restored by light-curing composite material;
 tooth 1.1 is prepared for a crown tangentially, the filling coming out;
 tooth 2.1-prepared for the crown tangentially, restored with cement and anchor pin;
 tooth 2.2-Radix;
 teeth 3.1, 4.1, 4.3 – seals in the cervical region, do not meet clinical requirements – overhanging edges, color change.
 Teeth 1.6, 1.7, 2.3, 2.5 were prepared tangentially, previously treated with resorcinol - formalin method.
 Vertical deformation of the alveolar parts of the upper jaw and lower jaw
 In the teeth 1.6, 1.7 and 4.4.
 Have teeth: 1.1, 1.2, 1.6, 1.7, 2.1, 2.3, 2.5 – crown parts are changed in color, seals do not meet clinical requirements.
 The tooth 1.6-secondary caries.
 It has a domed shape with a pronounced torus. Horizontal erase facets are noted.
 Tartar in the teeth 3.1, 4.1, 4.2, 4.3.
 Orthopantomogram:



Questions:

1. Make a diagnosis.
2. Plan of surgical treatment without implantation.
3. Plan of orthopedic treatment with crowns, bridges dentures and clasp prosthesis with clamp fixation system.
4. What will be the rehabilitation and preventive stage in this the patient?

Test questions / tasks (example) (PC-2.5, 6, 8, 9)

1. Medium anatomical and adjustable articulators. Features of clinical application.
2. Facial bow. Purpose, rules of use.
3. Axiography. Diagnostic relevance.

Subjects of abstracts (approximate) for independent work of students

1. Modern hardware methods of diagnostics of occlusion of dentition at the stage of planning of complex treatment of patients with the parodontal pathology.
2. Modern hardware methods of diagnostics of occlusion of dentition at the stage of planning of complex treatment of patients with the increased tooth abrasion.
3. Modern hardware methods of diagnostics of occlusion of dentition at the stage of planning of complex treatment of patients with the TMJ pathology.
4. Modern functional methods of diagnosis of masticatory muscles state at the stages of the orthopedic treatment.

5. Modern methods of determining the jaw centric relation.
6. Functional changes in the dentition with the partial absence of teeth.
7. Clinical application of middle anatomical and adjustable articulators.
8. Principles of modeling of chewing tubercles of artificial teeth in the design of dentures with partial and complete absence of teeth.
9. Modern methods of diagnostics of the functional state of the parodontium at the stage of planning complex treatment of patients with occlusive disharmony, defects of teeth and dentition.
10. Principles and methods of splinting teeth in the complex treatment of patients with parodontal disease and defects of the dentition.

The procedure, criteria and evaluation scale of intermediate certification

Students study the discipline «Maxillofacial prosthetics» in X semester.

To assess the quality of mastering the curriculum, a point-rating system and ECTS assessment are used.

Points are accumulated by students in the process of training sessions, monitoring progress and interim assessment during semester.

Academic discipline is considered mastered if a student has scored more than 50% of the possible number of points. The maximum mark for a discipline studied during the semester is 100 points, regardless of its volume.

A student does not receive these credits if during the course of study, working with a teacher and independently, gaining less than 51 points (out of 100 possible) for each semester.

Intermediate certification for the discipline in the X semester is carried out in the form of offset. Test consists of: testing, evaluation of practical skills of the student and interview.

The procedure for intermediate certification:

1. Conducting student testing
2. Evaluation of practical skills
3. Interview

The test is held at the end of the study of discipline in the semester.

The points scored by the student during the semester or at the end of the study of the discipline are translated into assessment according to the rules established in Table No. 9.

Таблица № 9

Score system of knowledge assessment				
Points of Score –Rating System	Traditional grades in RF	Points to transfer grades	Grades	ECTS grades
86 – 100	5	95 – 100	5+	A
		86 – 94	5	B
69 – 85	4	69 – 85	4	C
51 – 68	3	61 – 68	3+	D
		51 – 60	3	E

0 – 50	2	31 – 50	2+	FX
		0 – 30	2	F
51 – 100	Passed	51 – 100	Passed	Passed

Description of ECTS grades

A — Excellent (5+)

The theoretical content of the course has been mastered completely without gaps. The necessary practical skills with the mastered material have been formed. All the training tasks provided by the training program have been fulfilled, the quality of their implementation is assessed by the number of points close to the maximum. Student has a command of supplementary material that is not included in the training course.

B — Very good (5)

The theoretical content of the course has been mastered completely without gaps. The necessary practical skills of working with the mastered material have been basically formed. All the training tasks provided by the training program have been fulfilled, the quality of performance of most of them is assessed by the number of points close to the maximum. Command of some additional information not included in the training course.

C — Good (4)

The theoretical content of the course has been mastered completely, without gaps. Some practical skills of working with mastered material have not been sufficiently formed. All training tasks provided by the training program have been fulfilled, the quality of performance of none of them has been assessed by the minimum number of points. Some types of tasks have been completed with mistakes. Confident knowledge, limited curriculum material.

D — Satisfactory (3+)

The theoretical content of the course has been partially mastered, but the gaps are not significant. The necessary practical skills of working with the mastered material have been basically formed. Most of the training tasks included in the training program have been completed. Some of the completed tasks may contain mistakes.

E — Mediocre (3)

The theoretical content of the course has been partially mastered. Some practical skills are not formed. Most training tasks provided by the training program have not been fulfilled, or the quality of performance of some of them was estimated by the number of points close to the minimum. Теоретическое содержание курса освоено частично.

FX — Conditionally unsatisfactory (2+)

The theoretical content of the course has been partially mastered. The necessary practical skills are not formed. Most educational tasks provided by the training program have not been fulfilled, or the quality of their implementation is assessed by the number of points close to the minimum. With additional independent work on the course material it is possible to improve the quality of the performance of educational tasks.

F — Certainly unsatisfactory (2)

The theoretical content of the course has not been mastered. The necessary practical skills have not been formed. All completed assignments contain blunders. Additional independent work on the course material will not lead to any significant improvement in the quality of the training tasks.