Federal State Autonomous Educational Facility of Higher Education
Patrice Lumumba's Peoples' Friendship University of Russia

Medical institute

EDUCATION PROGRAM OF THE DISCIPLINE

«PROSTHODONTICS (SIMPLE PROSTHETICS)»

Recommended by MSSN\MO for the course of specialty

31.05.03 Dentistry

The discipline is carried out within the framework of the basic professional educational program of higher education (EP HE):

«Dentistry»

2024 г.

1. AIM OF THE DISCIPLINE

The purpose of mastering the discipline "Prosthodontics (simple prosthetics)" is to train a dentist who can diagnose and plan the prosthetic stage of the complex treatment of patients with diseases of the dentoalveolar system, taking into account the individual characteristics of the course of the disease and the age of the patient.

2. REQUIREMENTS OF THE RESULT OF MASTERING DISCIPLINE

The process of studying the discipline "Prosthodontics (simple prosthetics)" is aimed at the formation of the following competencies (parts of competencies):

Table 2.1 List of competencies which are formed while studying the discipline (result of mastering the discipline)

Code	Competence	Signs of acquiring the competence (in framework of the given discipline)
UC-1	Being able to implement critical analysis of problem situations based on systems approach, develop an action strategy.	UC-1.1. Analysing the problem situation as a system identifying its components and links between them.
GPC-5	Being able to examine a patient to determine a diagnosis while 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 deciding on laboratory and instrumental examinations 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 according to the current international classification of diseases and health problems.

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 considering 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 considering the medical care standards.
		GPC-6.2. Selecting medical products (including dental materials) for drawing up a comprehensive plan for dental disease treatment. Following up the treatment of a patient.
PC-1	Being able to make an examination of a patient to determine a diagnosis.	PC-1.1. Making an initial examination and/or reexamination of a patient 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 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 based on 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 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	Being able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	PC-2.6. Providing prosthetic 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	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	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.

3. THE PLACE OF THE DISCIPLINE IN THE STRUCTURE EP HE

The discipline "Prosthodontics (simple prosthetics)" refers to the basic part of block 1 of the curriculum.

Within the EP HE students also study other disciplines and undergo trainings which contribute to achievement of planned results after studying of the discipline "Prosthodontics (simple prosthetics)".

Table № 3.1. List of components of EP HE aimed at the formation of the competences of the discipline.

Code	Title of competence	Preceding disciplines	Subsequent disciplines (groups of disciplines)
CC-1.	Able to carry out a critical analysis of problem situations based on a systematic approach, to develop an action strategy.	Cariesology and the disease of hard dental tissues.	• Prosthodontics of edentulous patient • Prosthodontics (complex prosthetics)
GPC-5.	Able to conduct a patient examination in order to establish a diagnosis in solving professional problems	Cariesology and the disease of hard dental tissues.	• Prosthodontics of edentulous patient • Prosthodontics (complex prosthetics)

GPC-6.	Able to prescribe, monitor the effectiveness and safety of non-drug and drug treatment in solving professional problems	Cariesology and the disease of hard dental tissues.	• Prosthodontics of edentulous patient • Prosthodontics (complex prosthetics)
PC-1.	Able to conduct examination of the patient to establish a diagnosis.	• Cariesology and the disease of hard dental tissues. • Propaedeutics of dental diseases	• Prosthodontics of edentulous patient • Prosthodontics (complex prosthetics)
PC-2.	Capable of prescribing, monitoring the efficacy and safety of non-drug and drug treatments	• Cariesology and the disease of hard dental tissues. • Propaedeutics of dental diseases	• Prosthodontics of edentulous patient • Prosthodontics (complex prosthetics)
PC-6.	Able to analyze and publicly present medical information based on evidence-based medicine, to participate in scientific research, to introduce new methods and techniques aimed at protecting public health	• Cariesology and the disease of hard dental tissues. • Propaedeutics of dental diseases	• Prosthodontics of edentulous patient • Prosthodontics (complex prosthetics)

4. THE SCOPE OF THE DISCILINE AND TYPRES OF EDUCATIONAL WORK

The overall complexity of the discipline "Prosthodontics (simple prosthetics)"____2__credits.

Table № 4.1 Types of educational work by periods of mastering the EP HE for full-time education

Type of study	Total hours	Semesters
		5
Classroom tutorials (total)	45	45
Including:		
Lectures		

Practical classes (PC)		
Seminars (S)		
Laboratory research (LR)	45	45
Independent work (total)	24	24
Control (exam)	3	3
Total labor intensity hours	**72**	**72**
credits	**2**	**2**

5. CONTENT OF THE DISCIPLINE

Table 5.1. Content of the discipline sections

Title of section of the discipline	Section Topics	Type of work
Section 1. Methods of examination of patients in the clinic of prosthetic dentistry. Organization of prosthetic dental care.	Topic 1.1 Modern equipment, machines, tools at the workplace of a prosthodontist. Medical documentation, rules for filling it. Sanitary and anti-epidemic measures. Methods of examination of patients in the clinic of prosthetic dentistry: clinical and additional. Additional survey methods. X-ray methods of examination. Indications for X-ray examination. "Reading" of X-rays. Methods for determining the functional state of the dentition (static, functional). Medical documentation and rules for filling it. Medical case as a scientific medical and legal document.	LR
	Topic 1.2 Pathology of hard tissues of teeth. Classification. Etiological factors, clinic. Diagnostics. Basic and additional diagnostic methods. Diagnostic models. Characterization of impressions and impression materials. Features of alginate impression materials. Assessment of the quality of impressions. Getting plaster models. Analysis of diagnostic models. Differential diagnosis. Features of filling out a medical outpatient card (form 43-u) for patients with defects in dental hard tissues.	LR
Section 2. Methods of prosthetic treatment of patients with defects of hard dental tissues by inlays.	Topic 2.1 Treatment of pathology of hard tissues of teeth. Types of dentures that restore the anatomical shape and size of the destroyed tooth crown. The choice of the method of orthopedic treatment depending on the index of destruction of the clinical crown. Cavity classifications. Indications and contraindications for inlay prosthetics. Types, classification of inlays. Clinical requirements for inlays.	LR

	Topic 2.2 Materials for making inlays. Methods for modeling inlays (clinical and laboratory). Clinical and laboratory stages of making inlays. Features of preparation for various types of inlays. Modern materials and technologies for the manufacture of inlays in prosthetic dentistry.	
Section 3. Methods of prosthetic treatment of patients with defects of hard dental tissues by crowns.	Topic 3.1 Artificial crowns. Types, classification of artificial crowns. Indications and contraindications for prosthetics with artificial crowns. Clinical requirements for artificial crowns. Materials for the manufacture of artificial crowns.	LR
	Topic 3.2 Features of preparation of teeth in the manufacture of stamped metal crowns. Criteria for assessing the quality of tooth preparation. Prevention of errors and complications at the stage of preparing teeth for crowns.	
	Topic 3.3. Artificial crowns. Clinical and laboratory stages of prosthetics with metal stamped crowns. Clinical stage of fitting a metal swaged crown. Requirements to be met by a metal swaged crown and quality assessment criteria. Determination of the depth of immersion in the gingival groove. The presence of contact points, the tightness of the edge of the crown to the tooth tissues, analysis of restoration of the shape of the dentition, determination of contact with antagonists. Possible errors at the clinical and laboratory stages of the manufacture of stamped metal crowns and complications during their use.	
	Topic 3.4. Prosthetic treatment with cast all-metal crowns. Indications and contraindications. Principles, techniques, features of tooth preparation. The method of forming the gingival ledge, its shape, location in relation to the gum. Methods of expansion (retraction) of the periodontal sulcus. Fitting a cast all-metal crown. Clinical requirements to be met by all-metal cast crowns. Determination of the tightness of the crown to the tooth tissues.	

	Topic 3.5. Artificial cast all-metal crowns. Laboratory stages of manufacturing a cast all-metal crown. Features of making working models. Technique of precision casting of metal alloys. Characteristics of metal alloys for the manufacture of solid structures. Composition, properties. Requirements to be met by alloys for metal-ceramic crowns. Working and additional impressions.	
	Topic 3.6. Artificial combined crowns. Features of preparation with a shoulder. Materials for veneering crowns. Features of the frameworks of metal-plastic and metal-ceramic crowns. Working silicone two-layer one-step and two-step impressions	
	Topic 3.7. Metal-ceramic crowns. Laboratory stages of production of metal-ceramic crowns. Ceramic facing materials: composition, properties. Correction of the color of the cladding. Glazing of a metal-ceramic crown. Occlusal fit.	
	Topic 3.8. Metal-ceramic crowns. The peculiarity of the clinical stages of prosthetics. Checking the availability of space for the application of the facing material. Selection of the color of the facing material. Fitting a metal-ceramic crown in the oral cavity. Correction of the occlusal relationship. Possible errors at the clinical and laboratory stages of the manufacture of metal-ceramic crowns, their consequences and methods. Disadvantages of combined crowns.	
	Topic 3.9. Prosthetic treatment of dental hard tissue defects with ceramic crowns. Indications and contraindications for their use. Features of preparation of teeth. Obtaining impressions. Clinical and laboratory stages of manufacturing. Materials for the manufacture of ceramic crowns, their composition, properties. The stage of choosing the color in the orthopedic treatment of patients with defects in the hard tissues of the teeth. Hardware method.	
	Topic 3.10. Artificial crowns. Acrylic crowns. Indications and contraindications. Clinical and laboratory stages of prosthetics with acrylic crowns. Features of tooth preparation. Fitting a acrylic crown. Disadvantages of acrylic crowns. Temporary crowns. One-stage	

	(clinical) fabrication of temporary acrylic crowns. Technique and materials for temporary fixation.	
Section 4. Methods of prosthetic treatment of patients with total destruction of the crown of the tooth.	Topic 4.1. Complete absence (destruction) of the tooth crown. Etiology. Methods of orthopedic treatment with complete destruction of the tooth crown. Types of prosthetic pin structures (anchor pins, stump pin tabs, pin teeth). Indications for choosing a method of treatment with a pin construction, depending on the clinical condition of the gingival part of the root. Requirements to be met by the root and its periapical tissues for prosthetics. Modern technologies for the manufacture of pin structures. Restoration with stump pin structures. Preparation of the gingival part and root canal. Direct method of making a wax composition with a pin. An indirect method of making a post-core structure.	LR
Section 5. Methods of prosthetic treatment of patients with defects of hard dental tissues. Clinical step: cementation of restorations.	Topic 5.1. Clinical stage of fixation of the orthopedic structure. Fixation is a temporary constant; cement, adhesive. Types of cements and materials used for fixing crowns, inlays, veneers, post structures. Features of the adhesive fixation technique. Factors influencing the choice of the fixation technique	LR
	Topic 5.2. Crowns removal techniques, sawing and debonding tools and techniques.	

6. MATERIALS AND TECHNICAL SUPPORT OF THE DISCIPLINE

Table 6.1. Material and technical support of the dicipline

Classroom type	**Equipment of the classroom**	**Specialized educational / laboratory equipment, software and materials for mastering the discipline** **(if necessary)**
Lecture	An auditorium for lecture-type classes, equipped with a set of specialized furniture; board (screen) and technical means of multimedia presentations.	
Laboratory №1	An auditorium for laboratory work, individual consultations, current control, and intermediate certification, equipped with a set of specialized furniture and equipment.	student's double desk -13, teacher's chair -2; LCD panel, personal computer-monoblock, video camera on a tripod, metal cabinet for storing equipment, built-in cabinet for materials and tools -6 pcs, sink, mobile trash can with a lid for at least 200 liters,

Classroom type	Equipment of the classroom	Specialized educational / laboratory equipment, software and materials for mastering the discipline (if necessary)
		glass cabinet with visual aids - types of dentures. Safe metal four-section for storing tips and burs Computers with the CEREC 3D program - 14 pieces. **Specialized educational/laboratory equipment and materials:.** UV lamps -7. Photopolymerizer for individual trays -7. Dental motors - 14. Dental electric spatulas - 14 pcs. Water baths -4 pcs. Stands with types of dentures and instruments. ***Instruments:*** Diagnostic models with defects of teeth - 12 sets. Samples of dentures: inlays, crowns, pin structures - 12 sets Modeling wax - 12 sets Anvil - 3 Hammer for fitting crowns - 3 Beak forceps -3 Crampon tongs-3 Coronal scissors -3 Silicone base impression material 900 g per group Impression trays No. 3 for the upper and lower jaws, 14 each Resin for temporary crowns 10 g per student Light-curing polymer for modeling inlays 10g per student Material for adhesive fixation of crowns - 0.5 g per student Vaseline - 14 tubes Material for temporary fixation - 5 g per student Cotton swabs insulating ro 2 per student Glass for mixing cement - 14
Laboratory №2	An auditorium for laboratory work, individual consultations, current	15 sets of specialized furniture - tables under

Classroom type	Equipment of the classroom	Specialized educational / laboratory equipment, software and materials for mastering the discipline (if necessary)
	control and intermediate certification, equipped with a set of specialized furniture and equipment.	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 units for the doctor [2 M4 turbine hoses] and assistant [multifunction gun, saliva suction, vacuum cleaner], multifunctional pedal , Venturi aspiration system with a centralized electric pump, FRASACO dental models-phantoms (Germany) on a minitorso with an articulator, FRASACO models of edentulous upper and lower jaws with a face mask and pneumatic or mechanical adjustment of the phantom position along 2 axes in the form of a long table for 12 places for vis-a-vis and 2 quadruple modules in the form of "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 trash bin with 250 liter lid. Dental chair with a lamp and a Frasaco phantom chair with an articulator, models of edentulous upper and lower jaws, a face mask and mechanical adjustment of the phantom position along 2 axes. Wall screen and multimedia projector Epson. Dell LCD panel with a diagonal of at least 120cm. **Specialized educational/laboratory equipment and materials:** • Portable vibrating table - 4 • Trimmer -1 Vacuum plaster mixer - 1.

Classroom type	Equipment of the classroom	Specialized educational / laboratory equipment, software and materials for mastering the discipline (if necessary)
		Scales for gypsum, Apparatus for cleaning and lubricating tips "Assistina"-1. Steam-jet device for cleaning dentures - 1. Vacuumformer-1. ***Instruments:*** Disposable examination kits 400 sets; turbine tips - 14 pcs., straight tips -14 Models of the upper and lower jaws ChVN 28A - 14 sets Protective screens for a dentist -14 Spatulas for kneading gypsum -14 Silicone flasks for mixing gypsum-14, Plaster knife - 14 Dental spatula - 14 pcs. Inspection tool kits -14 sets Table lamps on brackets-14 pcs Impression spoons number 3 for the upper and lower jaws metal perforated by 14. Alginate weight 200 g per student Gypsum 2 class 500 g per student Zarnitsa type teeth for ChVN28A - No. 36 - 2 people each. for student No. 34, 1 each; No. 11 - 1 tooth each. Preparation burs set of 5 Vladmiva burs for every 5 students. Carbide core saw - 1 per 5 students. Articulating paper 100 microns thick - 2 sheets per student C-silicone for impressions - a set of 900 grams of the main mass and corrective for each group of students Material for cement fixation - 5 g per student Insulating cotton swabs, 2 per student Glass for mixing cement - 14

Classroom type	Equipment of the classroom	Specialized educational / laboratory equipment, software and materials for mastering the discipline (if necessary)
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 • Computer program for tooth shade determination • Computer program Pep-check • CEREC computer program
For independent work of students	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. METHODOLOGICAL AND INFORMATIONAL SUPPORT FOR THE DISCIPLINE

Main literature:

1. Orthopedic dentistry: textbook / S.D. Arutyunov, E.A. Bragin, S.I. Burlutskaya [and others]; edited by E.S. Kalivradjian, I.Yu. Lebedenko, E.A. Bragin, I.P. Ryzhova. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2020 .-- 800 p. : ill. - ISBN 978-5-9704-5272-1: 2200.00.

2. Technology of dental and maxillary prosthetics [Text]: a guide for practical training / V. N. Trezubov, E. A. Bulycheva, S. D. Arutyunov. - Moscow: Practical Medicine, 2020 .-- 167 p. : ill., color. silt ; 25 cm. - Bibliography: p. 167 (10 titles). - 500 copies - ISBN 978-5-98811-582-3 (in translation)

3. Guide to practical exercises in orthopedic dentistry for 3rd year students / edited by I. Yu. Lebedenko, V. V. Erichev, B. P. Markov / (Authors: S. D. Arutyunov, etc.) allowance. - M .: Practical Medicine, 2006. (Part I. - 432 s).

4. Denture technology: textbook / S.D. Arutyunov, D.M. Bulgakova, M.G. Grishkina [and others]; ed. M.M. Rasulova, T.I. Ibragimova, I. Yu. Lebedenko. - 2nd ed., Rev. and add. - M.: GEOTAR-Media, 2016 .-- 384 p. - ISBN 978-5-9704-3830-5. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn_FindDoc&id=475755&idb=0

Additional literature

1. Prosthetic dentistry [Text]: Textbook / V.N. Kopeikin [and others]; Ed. V.N. Kopeikina, M.Z. dental faculties of medical universities). - ISBN 5-225-04598- Mirgazizova. - 2nd ed., Add. - M.: Medicine, 2001 .-- 624 p. : ill. - (Educational literature for students 7: 276.00.56.6 - O-70

2. I.Yu. Lebedenko, T.I. Ibragimov, A.N. Ryakhovsky
Functional and instrumental research methods in orthopedic dentistry [Text]: Textbook for universities. - M.: Medical Information Agency, 2003. - 128 p. : ill. - ISBN 5-89481-135-X: 260.00.56.6 - L33.
3. Fixed prosthetics: the technology of manufacturing a steel stamped crown [Electronic resource]: Teaching aid / L.S. Sergeeva. - SPb. : Publishing house "Lan", 2018. - 52 p. - (Textbooks for universities. Special literature). - ISBN 978-5-8114-2863-2.
4. Prosthetic dentistry: national leadership / ed. I.Yu. Lebedenko, S.D. Arutyunova, A.N. Ryakhovsky. - GEOTAR - Media, 2016 .-- 824 p.

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 "Prosthodontics (simple prosthetics)":

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. EVALUATION MATERIALS AND SCORE-RATING SYSTEM FOR ASSESSING THE LEVEL OF FORMATION OF COMPETENCES IN THE DISCIPLINE

Evaluation materials and a score-rating system* for assessing the level of competency formation (parts of competencies) based on the results of mastering the discipline of the discipline "Prosthodontics (simple prosthetics)" are presented in the Appendix to this Work Program of the discipline.

* - OM and BRS are formed based on the requirements of the relevant local normative act of the Peoples' Friendship University of Russia. Sections of disciplines and types of classes

DEVELOPERS:

Professor of the Department
of prosthetic dentistry — Bykova M. V.

Head of the Department
of prosthetic dentistry,
professor — Lebedenko I. Yu.

The head of EP HE,
Deputy director MI
on the specialty “Dentistry”
professor — Razumova S. N.

Appendix №1
to the discipline "Prosthodontics (simple prosthetics)"

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

Table № 1.

Assessment tools	Quantity
Control questions	50
Tasks in the test form	100
Case study	15

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

1.1.1. Tasks in test form (example)(UC-1, GPC-5,6, PC-1,2,6)

1. ARTIFICIAL CROWNS CAN BE ACCORDING TO THE MANUFACTURING METHOD:
    a. Acrylic
    b. Metal
    c. Casted*
    d. PFM
2. THE WHOLE CROWN DESTRUCTION IS THE INDICATION FOR
    a. Post and crown*
    b. PFM crown
    c. Veneer
    d. Inlay

1.1.2. Situational tasks (example)

Task (UC-1, GPC-5,6, PC-1,2,6)

Patient V. came to the clinic with complaints of darkening of the anterior tooth of the upper jaw.

Objectively: tooth 1.1 is intact, tooth 2.1 has an extensive carious cavity, on the palatal surface with access to both contact surfaces.

Additional research methods: the sighting X-ray shows insignificant periapical changes in the form of a darkening focus of 1, 1 mm in diameter.

What diagnosis can be made in the presence of these complaints and objective research? Suggest a treatment plan.

Answer.

Diagnosis: Chronic periodontitis. Endodontic treatment. Remove caries-affected tissues. Make a pin stump tab. Restore a tooth with a crown

1.1.3. Control tasks/questions

Name the crown types ((UC-1, GPC-5,6, PC-1,2,6)

1.2. Procedure, criteria and assessment scale for intermediate certification

The discipline is studied in the V semester.

To assess the quality of mastering the curriculum, a point-rating system (BRS) and ECTS assessments are used.
Points are accumulated by students in the course of academic studies, monitoring of progress and intermediate certification during the semester.
The academic discipline is considered mastered if the student scored more than 50% of the possible number of points. The maximum mark for the discipline studied during the semester is 100 points.
A student does not receive these credits if, during his studies, working with a teacher and on his own, he scores less than 51 points (out of 100 possible).
Intermediate certification for the discipline is carried out in the form of a test.
The test consists of: testing and interview.
Interim certification procedure:
1. Conducting testing of students
2. Interview
The test is carried out at the end of the study of the discipline in the semester.
The points scored by the student during the semester or at the end of the study of the discipline are converted into an assessment according to the rules established in Table No. 10.

Table № 2

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.

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.