

Документ подписан простой электронной подписью  
Информация о владельце:  
ФИО: Ястребов Олег Александрович  
Должность: Ректор  
Дата подписания: 07.06.2023 15:57:03  
Уникальный программный ключ:  
ca953a0120d891083f939673078ef1a989dae18a

**Federal State Autonomous Educational Institution of Higher Education  
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA  
RUDN University**

**Institute of Medicine**

---

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

## **COURSE SYLLABUS**

### **MAXILLOFACIAL PROSTHETICS**

---

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

**2022-2023**

## **1. COURSE GOAL(s)**

The goal of the course «**Maxillofacial prosthetics**» is to equip students with knowledge of theoretical knowledge and practical skills in maxillofacial prosthetics on the discipline of orthopedic dentistry on specialty "Dentistry", necessary for a dentist in outpatient and inpatient settings.

## 2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course (module) «**Maxillofacial prosthetics**» 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. Analysing the problem situation as a system identifying its components and links between them.
GPC-5		GPC-5.1. Gathering anamnesis by analysing 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 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 based on the current international statistical 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 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.

Competence code	Competence descriptor	Competence formation indicators (within this course)
		<p data-bbox="810 622 1501 797">GPC-6.2. Selecting medical products (including dental materials)for drawing up a comprehensive plan for dental disease treatment. Following upthetreatment of a patient.</p>
PC-1	Being able to make an examination of a patient in order to determine a diagnosis.	<p data-bbox="810 860 1493 969">PC-1.1. Making an initial examination and/or reexamination of a patient in order to make a preliminary diagnosis.</p> <p data-bbox="810 1079 1501 1341">PC-1.2. Receiving information from patients (their relatives/legal representatives); conducting a questionnaire survey of patientsregarding their general health status; identifying concomitant diseases in order to make a preliminary diagnosis.</p> <p data-bbox="810 1402 1501 1756">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.</p> <p data-bbox="810 1771 1501 2031">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.</p>

Competence code	Competence descriptor	Competence formation indicators (within this course)
		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 prosthodontic 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. 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*

<b>Competence code</b>	<b>Competence descriptor</b>	<b>Previous courses/modules*</b>	<b>Subsequent courses/modules*</b>
GC-1	GC-1. Being able to implement critical analysis of problem situations based on systems approach, develop an action strategy.	<ul style="list-style-type: none"> <li>• Prosthodontics (basics)</li> <li>• Prosthetic rehabilitation of edentulous patients</li> <li>• Prosthodontics (advanced)</li> <li>• Gnathology and functional analysis of temporomandibular joint</li> </ul>	
GPC-5	GPC-5. Being able to examine patients to determine a diagnosis when solving professional tasks	<ul style="list-style-type: none"> <li>• Prosthodontics (basics)</li> <li>• Prosthetic rehabilitation of edentulous patients</li> <li>• Prosthodontics (advanced)</li> <li>Gnathology and functional analysis of temporomandibular joint</li> </ul>	
PC-1	PC-1. Being able to make an examination of a patient in order to determine a diagnosis.	<ul style="list-style-type: none"> <li>• Prosthodontics (basics)</li> <li>• Prosthetic rehabilitation of edentulous patients</li> <li>• Prosthodontics (advanced)</li> <li>Gnathology and functional analysis of temporomandibular joint</li> </ul>	
PC-2	PC-2. Being able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	<ul style="list-style-type: none"> <li>• Prosthodontics (basics)</li> <li>• Prosthetic rehabilitation of edentulous patients</li> <li>• Prosthodontics (advanced)</li> <li>Gnathology and functional analysis of temporomandibular joint</li> </ul>	

PC-6	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	<ul style="list-style-type: none"> <li>• Prosthodontics (basics)</li> <li>• Prosthetic rehabilitation of edentulous patients</li> <li>• Prosthodontics (advanced)</li> </ul> Gnathology and functional analysis of temporomandibular joint	
------	--	--	--

#### 4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course is 2 credits (72 academic hours).

Table 4.1. Types of academic activities during the periods of higher education programme mastering (**full-time training**)\*

Type of academic activities		Total academic hours	Semesters/training modules
			10
<i>Contact academic hours</i>		45	
including:			
Lectures (LC)			
Lab work (LW)		45	45
Seminars (workshops/tutorials) (S)		-	-
<i>Self-studies</i>		27	27
<i>Evaluation and assessment (exam/passing/failing grade)</i>			
<b>Course workload</b>	academic hours_	<b>72</b>	<b>72</b>
	credits	<b>2</b>	<b>2</b>

#### 5. COURSE CONTENTS

Table 5.1. Course contents and academic activities types

Course module title	Course module contents (topics)	Academic activities types
<b>Module 1</b> Modern methods of diagnostics in maxillofacial prosthetics.	General concepts of maxillofacial prosthetics. Basic principles. Classification of maxillofacial and facial prostheses, retention methods. Methods of obtaining impressions and features of the manufacture of plaster model of the face, ear, intraocular space. Specifics of hygienic care of the prosthesis and prosthetic bed. Planning the retention of prostheses using	LW

Course module title	Course module contents (topics)	Academic activities types
	<p>dental implants.</p> <p>Principles, stages of rehabilitation of patients, clinical and laboratory stages of manufacturing implant-supported prostheses. Main bioadaptive polymeric materials used in manufacturing facial prostheses. Silicones of room polymerization. Platinum - silicones. Pigmented silicones for inner outer colouring facial prostheses. Specifics of care of patients with defects of the maxillofacial area. Terms of control checkups. Functional disorders in injuries of the maxillofacial area. Basics of therapeutic gymnastics, mechanotherapy.</p>	
<p><b>Module 2</b> Specifics of prosthetic treatment of patients with injuries and post traumatic defects of the maxillofacial area.</p>	<p>Purposes of the orthopedic stage in complex rehabilitation of patients with diseases and injuries of the maxillofacial area.</p> <p>Immobilization and fixation of injured jaw for the patients' transfer.</p> <p>Various maxillofacial prosthodontic and devices for repositioning, fixation and substitution for both upper and lower jaws and also edentulous jaws. Prosthodontic approaches for rehabilitation of irregularly fused fractures.</p> <p>Microstomia. Gymnastics, physiotherapy and mechanical therapy.</p>	LW
<p><b>Module 3</b> Prosthetic treatment of patients with congenital malformations of upper jaw and palate</p>	<p>Peculiarities of congenital partial and full clefts of lips, palate and jaw. Stages of rehabilitation. Prosthodontic rehabilitation of elderly patients with congenital malformations using artificial external frame.</p>	LW
<p><b>Module 4</b> Prosthetic treatment of patients with post surgical oncological defects.</p>	<p>Classification of palatal defects. Stages of rehabilitation of post surgical oncological defects. Impression taking of the defect of upper jaw. Manufacturing of provisional obturator. Peculiarities of construction of the obturator part of upper jaw dentures. Indication and contraindications.</p>	LW

Course module title	Course module contents (topics)	Academic activities types
<b>Module 5</b> Facial prosthetics. Main principles of manufacturing nasal, auricular and orbital prosthesis.	Conventional and digital impression of auricle. Analog and digital wax up of auricle. Basic principles of facial prostheses manufacturing, materials and methods of their retention. Nasal, auricle and orbital prosthesis. Facial prostheses and defect aftercare.	LW
<b>Module 6</b> Prevention of sport injuries	Types of bite splints for sport wear. Methods of their fabrication. Heat formation method of splint fabrication.	LW

\* - 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)
Lab work	A special two-seats table – 13, a chair for a docent, liquid-crystal TV, PC, a video camera on tripod, Metal furniture, garbage container 200 Ltr. Various dental and maxillofacial prostheses. Tresor for handpieces and burs.	A display with various splints and prostheses. Stone casts with various jaw defects –14 sets Various bite splints – 14 sets. Silicone impression material 900 g for each group.
Lab work	A room for laboratory workshops with 15 phantoms “Saratoga S.p.a.” a stone table with a lamp. Philips monitor, two dental turbine tubes, multifunctional pistol, dental suctioning module, big suctioning module. Aspiration system Venturi, dental phantom models FRASACO on a phantom (28 pieces) Metal table for dental stone casting for 14 working places. Garbage container	Phantom dummies – 14 pieces <ul style="list-style-type: none"> <li>• Vibro-table- 4.</li> <li>• Dental trimmer -1.</li> <li>• Vacuum mixer for dental stone – 1.</li> <li>• Scale for gypsum - 1</li> <li>• Steam flow apparatus 1.</li> <li>• Vacuumformer-1.</li> </ul> Instruments <ul style="list-style-type: none"> <li>• Spatula -14</li> <li>• Silicone container-14,</li> <li>• Dental stone knife – 14</li> <li>• Dental technician spatula – 14</li> <li>• Discs for vacuumformer – 1 for each student</li> </ul>



Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
	250 Litre. Liquid crystal panel Dell 120 cm and BEMA Epson.	<ul style="list-style-type: none"> <li>• Dental stone 2 class 250 g for each student</li> <li>• C-silicone 900 g</li> </ul>

## 7. RECOMMENDED SOURSES for COURSE STUDIES

### *Main readings:*

1. Ortopedicheskaya stomatologiya [Elektronnyj resurs]: Uchebnik / Pod red. I.Y. Lebedenko, E.S. Kalivradzhiyana. - M.: GEOTAR-Media, 2016. - 640 s. - ISBN 978-5-9704-3722-3.
2. Zuboproteznaya tekhnika [tekst]: Uchebnik dlya vuzov / Pod red. M.M.Rasulova, T.I.Ibragimova, I.Y.Lebedenko, . - M.: MIA, 2005. - 448 s.: il. - ISBN 5-89481-311-5: 320.00.
3. Lebedenko Igor' Yul'evich. Funkcional'nye i apparaturnye metody issledovaniya v ortopedicheskoy stomatologii [Tekst]: Uchebnoe posobie dlya vuzov / I.Y. Lebedenko, T.I. Ibragimov, A.N. Ryahovskij. - M.: Medicinskoe informacionnoe agentstvo, 2003. - 128 s.: il. - ISBN 5-89481-135-H: 260.00.
4. Ortopedicheskaya stomatologiya [Tekst]: Uchebnik / V.N. Kopejkin [i dr.]; Pod red. V.N.Kopejkina, M.Z.Mirgazizova. - 2-e izd., dop. - M.: Medicina, 2001. - 624 s.: il. - (Uchebnaya literatura dlya studentov stomatologicheskikh fakul'tetov medicinskih vuzov). - ISBN 5-225-04598- 7: 276.00.
5. Gavrilov Evgenij Ivanovich. Ortopedicheskaya stomatologiya [Tekst]: Uchebnik / E.I. Gavrilov, A.S. Shcherbakov. - 3-e izd. pererab. i dop. - M.: Medicina, 1984. - 576 s.: il. - 1.70.

### *Additional reading:*

1. Bulgakov Vsevolod Sergeevich. Rol' dispanserizacii k klinike ortopedicheskoy stomatologii pri protezirovanii s ispol'zovaniem implantatov / V.S. Bulgakov, T.V. Lukyanova, I.I. SHakerov // Vestnik Rossijskogo universiteta druzhby narodov: Medicina. - 2010. - №1. - S. 125 - 129.
2. Okklyuziya. Artikulyaciya. Biomekhanika v praktike ortopedicheskoy stomatologii [Elektronnyj resurs]: Uchebno-metodicheskoe posobie / Sost. V.S. Bulgakov, S.N. Razumova. - M.: Izd-vo RUDN, 2009. - 35 s. - ISBN 978-5-209-03385-1: 0.00.
3. Obsledovanie bol'nogo v klinike ortopedicheskoy stomatologii. Testy [Tekst] : Uchebno-metodicheskoe posobie / RUDN; Sost. V.S.Bulgakov, SH.H.Saakyan. - M. : Izd-vo RUDN, 2007. - 20 s.
4. ovremennye ottisknye materialy : Praktikum / Avt.-sost.: G.S.SHusharina i dr. - Velikij Novgorod, 2005. - 23 s.: il. - 0.00.
5. Prohonchukov Aleksandr Alekseevich. Funkcional'naya diagnostika v

stomatologicheskoy praktike [Tekst] / A.A. Prohonchukov, N.K. Loginova, N.A. ZHizhina. - M.: Medicina, 1980. - 272 s.: il. - (Biblioteka prakticheskogo vracha. Vazhnejshie voprosy stomatologii). - 0.80.

6. Kurljandskij V.Ju. Atlas of orthopaedic stomatology [Tekst] / V.J. Kurljandskij; Transl. from the Russ. by L.Aksenova. - 2nd print.; Kniga na anglijskom yazyke. - Moscow: Mir, 1978. - 647 p.: il. - 5.66.
7. Rukovodstvo po ortopedicheskoj stomatologii [Tekst] / Pod obshch. red. A.I.Evdokimova. - M.: Medicina, 1974. - 568 s.: il. - 3.54.
8. Kurlyandskij Veniamin Yur'evich. Slovar'-spravochnik po ortopedicheskoj stomatologii / V.YU. Kurlyandskij, D.E. Kalontarov. - Tashkent: Medicina, 1970. - 327 s.: il. - 1.75.
9. Zuboproteznaya tekhnika [Tekst]: Uchebnik dlya med. uchilishch / V.N. Kopejkin [i dr.]. - 2-e izd., ispr. i dop. - M.: Medicina, 1967. - 432 s.: il. - 0.89.

### ***Internet (based) sources***

- 1. Electronic libraries with access for RUDN students:
  - Electronic library network of RUDN – ELN RUDN <http://lib.rudn.ru/MegaPro/Web>
  - ELN «University Library online» <http://www.biblioclub.ru>
  - ELN Urait <http://www.biblio-online.ru>
  - ELN «Student Advisor» [www.studentlibrary.ru](http://www.studentlibrary.ru)
  - ELN «Lan» <http://e.lanbook.com/>
- 2. Databases and search engines:
  - electronic fund of legal and regulatory and technical documentation <http://docs.cntd.ru/>
  - search system Yandex <https://www.yandex.ru/>
  - search system Google <https://www.google.ru/>
  - abstract database SCOPUS <http://www.elsevierscience.ru/products/scopus/>

### ***Training toolkit for self- studies to master the course*** \*:

1. The set of lectures on the course “Maxillofacial prosthetics”
2. The laboratory workshop (if any).on the course “Maxillofacial prosthetics”
3. The guidelines for writing a course paper / project (if any) on the course “Maxillofacial prosthetics”.
4. ....

\* The training toolkit for self- studies to master the course is placed on the course page in the university telecommunication training and information system under the set procedure.

## **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

\_\_\_\_\_

position, department

\_\_\_\_\_

signature

M. Bykova

\_\_\_\_\_

name and surname

Associate professor of  
department of prosthetic  
dentistry

\_\_\_\_\_

position, department

\_\_\_\_\_

signature

A. Unkovskiy

\_\_\_\_\_

name and surname

**HEAD OF EDUCATIONAL DEPARTMENT:**

Head of Department of  
prosthetic dentistry  
Professor

\_\_\_\_\_

name of department

\_\_\_\_\_

signature

I. Lebedenko

\_\_\_\_\_

name and surname

**HEAD  
OF HIGHER EDUCATION PROGRAMME:**

First Deputy Director of Medical  
Institute

\_\_\_\_\_

position, department

\_\_\_\_\_

signature

S. Razumova

\_\_\_\_\_

name and surname