

Документ подписан простой электронной подписью  
Информация о владельце:  
ФИО: Ястребов Олег Александрович  
Должность: Ректор  
Дата подписания: 04.10.2024 14:01:30  
Уникальный программный ключ:  
ca953a0120d891083f939673078ef1a989dae18a

**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 program developer

**COURSE SYLLABUS**

**IMPLANTOLOGY AND RECONSTRUCTIVE SURGERY**

---

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 program of higher education:**

**Dentistry**

---

higher education program profile/specialization title

## 1. COURSE GOAL(s)

The goal of the course «**Implantology and Reconstructive Surgery**» is to train the dentist able to provide surgical care to patients with defects of the maxillofacial tissues, to perform dental implantation for the full-fledged medical rehabilitation of patients with dental defects.

## 2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course (module) «**Implantology and Reconstructive Surgery**» is aimed at the development of the following competences /competences in part: GPC-2, GPC-5, GPC-6, GPC-7, GPC-9, PC-1, PC-2, PC-3, PC-5.

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

Competence code	Competence descriptor	Competence formation indicators (within this course)
GPC-2	Able to analyze results of given activities to prevent professional mistakes.	GPC-2.1. Analyzing the causes of professional errors, therapeutic failures and conflict situations.
		GPC-2.2. Providing scientific arguments for and implementing recommendations aimed at improving the medical and legal training of dentists, preventing professional errors, adverse outcomes and conflict situations.
GPC-5	Able to examine a patient in order to establish a diagnosis while solving professional problems	GPC-5.2. Formulating a preliminary diagnosis and drawing up a plan for laboratory and instrumental examinations of a dental patient.
GPC-6	Able to prescribe, monitor the effectiveness and safety of non-drug and drug treatment in solving professional problems	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 comprehensive plan for dental disease treatment. Following up the treatment of a patient.
GPC-7	Able to organize work and make professional decisions in case of emergency, in emergencies, epidemics and in outbreaks of mass destruction	GPC-7.1. Being able to use the algorithm for providing first aid in emergency conditions, including in extreme conditions and foci of mass destruction.
		GPC-7.2. Identifying conditions requiring emergency medical care, including clinical signs of sudden cessation of blood circulation and acute respiratory failure.
GPC-9	Able to assess morphological and functional states and pathological processes in the	GPC-9.1. Being able to use the algorithm of clinical, laboratory and functional diagnosis in dealing with professional tasks

	human body to solve professional problems	GPC-9.2. Evaluating the results of clinical, laboratory and functional diagnosis in dealing with professional tasks.
PC-1	Able to diagnose children and adults with dental diseases, making 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-2	Able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	PC-2.1. Organizing the provision of emergency and urgent medical care for acute dental diseases, conditions, exacerbation of chronic diseases, which pose a threat to the patient's life, or without obvious signs of a threat to the patient's life.
		PC-2.2. Selecting drugs and medical devices (including dental materials) for dental disease treatment assessing the possible side effects of taking medicinal drugs.
PC-3	Able to prescribe and conduct treatment of children and adults with dental diseases, monitoring its effectiveness and safety	PC-3.1. Providing qualified medical care in the specialty using modern rehabilitation methods approved for use in medical practice.
		PC-3.2. Drawing up an individual rehabilitation plan for a patient with diseases of the maxillofacial area.
PC-5	Able to make medical examinations to children and adults with dental diseases	PC-5.1. Motivating patients (their relatives/legal representatives) to stick to a healthy lifestyle and give up bad habits.
		PC-5.2. Promoting positive behavior so that patients (their relatives/legal representatives) maintain and improve their level of 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*
-----------------	-----------------------	---------------------------	-----------------------------

<p><b>GPC-2.</b></p>	<p>Able to analyse the results of their own professional activity to prevent professional errors</p>	<p>Local anesthesia and Anesthesiology in Dentistry, Oral and Maxillofacial Surgery and Gnathic Surgery; Diseases of the head and neck; Denture prosthetics (complex prosthetics), Full mouth dental implants</p>	<p>Maxillofacial Prosthetics, Geriatric Dentistry and mucosal diseases, Gnathology and functional diagnostics of temporomandibular joint</p>
<p><b>GPC-5.</b></p>	<p>Able to examine patients to determine a diagnosis when solving professional tasks</p>	<p>Local anesthesia and Anesthesiology in Dentistry, Oral and Maxillofacial Surgery and Gnathic Surgery; Diseases of the head and neck; Denture prosthetics (complex prosthetics), Full mouth dental implants <b>Practice:</b> manufacturing practice dental surgeon assistant</p>	<p>Maxillofacial Prosthetics, Geriatric Dentistry and mucosal diseases, Gnathology and functional diagnostics of temporomandibular joint <b>Practice:</b> manufacturing practice dental assistant</p>
<p><b>GPC-6.</b></p>	<p>Able to prescribe non-drug and drug treatment, monitor its efficacy and safety when solving professional tasks</p>	<p>Pharmacology, Histology, Embryology, Cytology – Oral histology, Microbiology, Virology – Oral microbiology, Local anesthesia and Anesthesiology in Dentistry, Oral and Maxillofacial Surgery and Gnathic Surgery; Diseases of the head and neck; Denture prosthetics (complex prosthetics), Full mouth dental implants <b>Practice:</b> manufacturing practice dental surgeon assistant</p>	<p>Maxillofacial Prosthetics, Geriatric Dentistry and mucosal diseases, Gnathology and functional diagnostics of temporomandibular joint, Clinical Pharmacology <b>Practice:</b> manufacturing practice dental assistant</p>

<b>GPC-7.</b>	Able to organize work and take professional decisions in case of emergency conditions, amid emergencies, epidemics, and in the foci of mass destruction	Public Health, Healthcare, Health and wellness, Epidemiology, Emergency medicine, Local anesthesia and Anesthesiology in Dentistry, Oral and Maxillofacial Surgery and Gnathic Surgery; Diseases of the head and neck; Denture prosthetics (complex prosthetics), Full mouth dental implants <b>Practice:</b> manufacturing practice dental surgeon assistant	Maxillofacial Prosthetics, Geriatric Dentistry and mucosal diseases, Gnathology and functional diagnostics of temporomandibular joint <b>Practice:</b> manufacturing practice dental assistant
<b>GPC-9.</b>	Able to assess morpho-functional, physiological conditions and pathological processes in the human body to solve professional tasks	Local anesthesia and Anesthesiology in Dentistry, Oral and Maxillofacial Surgery and Gnathic Surgery; Diseases of the head and neck; Denture prosthetics (complex prosthetics), Full mouth dental implants <b>Practice:</b> manufacturing practice dental surgeon assistant	Maxillofacial Prosthetics, Geriatric Dentistry and mucosal diseases, Gnathology and functional diagnostics of temporomandibular joint <b>Practice:</b> manufacturing practice dental assistant
<b>PC-1.</b>	Able to make an examination of a patient in order to determine a diagnosis.	Local anesthesia and Anesthesiology in Dentistry, Oral and Maxillofacial Surgery and Gnathic Surgery; Diseases of the head and neck; Denture prosthetics (complex prosthetics), Full mouth dental implants, Pediatric dentistry, Orthodontology and children's prosthetics <b>Practice:</b> manufacturing practice dental surgeon assistant	Maxillofacial Prosthetics, Geriatric Dentistry and mucosal diseases, Gnathology and functional diagnostics of temporomandibular joint, Orthodontology and children's prosthetics <b>Practice:</b> manufacturing practice dental assistant

<b>PC-2.</b>	Able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	Local anesthesia and Anesthesiology in Dentistry, Oral and Maxillofacial Surgery and Gnathic Surgery; Diseases of the head and neck; Denture prosthetics (complex prosthetics), Full mouth dental implants, Pediatric dentistry, Orthodontology and children's prosthetics <b>Practice:</b> manufacturing practice dental surgeon assistant	Maxillofacial Prosthetics, Geriatric Dentistry and mucosal diseases, Gnathology and functional diagnostics of temporomandibular joint, Orthodontology and children's prosthetics <b>Practice:</b> manufacturing practice dental assistant
<b>PC-3.</b>	Able to provide emergency medical treatment	Public Health, Healthcare, Health and wellness, Epidemiology, Emergency medicine,	Maxillofacial Prosthetics, Geriatric Dentistry and mucosal diseases, Gnathology and functional
		Local anesthesia and Anesthesiology in Dentistry, Oral and Maxillofacial Surgery and Gnathic Surgery; Diseases of the head and neck; Denture prosthetics (complex prosthetics), Full mouth dental implants <b>Practice:</b> manufacturing practice dental surgeon assistant	diagnostics of temporomandibular joint <b>Practice:</b> manufacturing practice dental assistant
<b>PC-5.</b>	Able to make medical examinations to children and adults with dental diseases	Local anesthesia and Anesthesiology in Dentistry, Oral and Maxillofacial Surgery and Gnathic Surgery; Diseases of the head and neck; Denture prosthetics (complex prosthetics), Full mouth dental implants, Pediatric dentistry, Orthodontology and children's prosthetics, Forensic Sciences <b>Practice:</b> manufacturing practice dental surgeon assistant	Maxillofacial Prosthetics, Geriatric Dentistry and mucosal diseases, Gnathology and functional diagnostics of temporomandibular joint, Orthodontology and children's prosthetics <b>Practice:</b> manufacturing practice dental assistant

\* 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 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
Contact academic hours	51	51
including:		
Lectures (LC)		
Lab work (LW)	51	51
Seminars (workshops/tutorials) (S)		
Self-studies, ac.h.	15	15
Evaluation and assessment (exam or pass/fail grading), ac.h.	6	6
<b>Total workload of the discipline</b>	ac.h.	<b>72</b>
	credits	<b>2</b>

\* 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
<b>Module 1</b> Anomalies and defects of maxillofacial region	<b>1.1</b> Surgical treatment for anomalies and defects of the upper and lower jaws. Operative intervention.	LW
<b>Module 2</b> Periodontology	<b>2.1</b> Surgical preparation of the oral cavity for prosthetics (bone grafting).	LW
	<b>2.2</b> Operations on the soft tissues of the oral cavity.	LW
	<b>2.3</b> Surgical methods in the complex treatment of periodontal diseases	LW
<b>Module 3</b> Dental and maxillofacial implantation	<b>3.1</b> Dental and maxillofacial implantation.	LW
	<b>3.2</b> Types of implantation. Indications, contraindications, diagnostics, preparation for surgery, methods of surgery.	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	Classroom for lab work, individual consultations, self-studies equipped with a set of specialized furniture (FHSS 286, CDC aud. №2)	Laptop, MS Office, Projector, Tables «Medical education», Photo protocol of patients, Video recordings of operations, Dental X-ray and CT, Translation of operations from the surgery room to the screen in the study room in online mode. Macropreparations, models, phantoms, Surgical kit for exodontia, splinting of teeth and jaws, reposition of zygomatic bone, suturing.
Self- studies	Classroom for self-studies of students (can be used for seminars and consultations), equipped with a set of specialized furniture, microscopes and computers with stable wireless Internet connection (FHSS 286, CDC aud. №2, Main building, lec.hall)	Laptop, MS Office, Projector, Tables «Medical education», Photo protocol of patients, Video recordings of operations, Dental X-ray and CT, Translation of operations from the surgery room to the screen in the study room in online mode. Macropreparations, models, phantoms, Surgical kit for exodontia, splinting of teeth and jaws, reposition of zygomatic bone, suturing.

\* The premises for students' self-studies are subject to **MANDATORY** mention

## 7. RESOURCES RECOMMENDED FOR COURSE STUDY

### *Main readings:*

1. Surgical dentistry and maxillofacial surgery: national guidelines / edited by A.A. Kulakov, T.G. Robustova, A.I. Nerobeeva. - M. : GEOTAR-Media, 2015. - 928 p. - (National Guidelines). - ISBN 978-5-9704-37278.
2. Surgical dentistry : textbook / under the general editorship of V.V. Afanasyev. - 3rd ed., reprint. M.: GEOTAR-Media, 2016. - 400 p. - ISBN in 978-5-9704-3704-9.
3. Bezrukov V.M, Robustova T.G. "Manual of surgical dentistry and maxillofacial surgery" 2nd ed., pererab, and add., Moscow, "Medicine", 2000. T1. pp. 245-280.
4. Maxillofacial surgery : textbook / edited by A.Y. Drobyshev, O.O. Yanushevich. - M. : GEOTAR-Media, 2018. - 880 p. - ISBN at 978-5-9704-4081-0.

### *Additional readings:*

1. Shargorodsky A.G. "Inflammatory diseases of the tissues of the maxillofacial region and neck" Moscow State Medical University of the Russian Federation 2001, pp. 5-14, 118-191, 237-254.
2. Mukovozov I.N. Differential diagnosis of diseases of the maxillofacial region. - L., "Medicine", 1982



3. Yanushevich O.O. Periodontology : national guide-M.: GEOTAR- Media, 2018. - 752 p.
4. Rabukhina N.A., Arzhantsev A.P. Roentgenodiagnosics in dentistry, 2nd edition, stereotypical // Moscow: MIA, 2003. – 451 p . стереотипное // М.: МИА, 2003. – 451 с.
5. Plastic surgery of soft tissues of the oral cavity. / Ed . Giovanni Zuccelli – M.: ABC, 2014 – 816 p .
6. Combined maxillofacial anomalies and defects: a guide for doctors/ Ed. Andreishcheva A.R. - M.: GEOTAR-Media, 2008. — 224 p.

**Internet (based) sources:**

1. Electronic libraries with access for RUDNstudents:
  - 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/>
  - abstract database SCOPUS <http://www.elsevierscience.ru/products/scopus/>
  - WHO Documentation Center <http://whodc.mednet.ru/>
  - electronic library on surgery <http://window.edu.ru/resource/993/56993>

**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 (GPC-2, GPC-5, GPC-6, GPC-7, GPC-9, PC-1, PC-2, PC-3, PC-5) 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:**

**Associate Professor of the  
Department maxillofacial  
surgery  
and surgical dentistry**

---

position, department

**V.D. Trufanov**

---

name and surname

**Assistant of the  
Department  
maxillofacial  
surgery  
and surgical dentistry**

---

position, department

**I.S. Fomenkov**

---

name and surname

**HEAD OF EDUCATIONAL DEPARTMENT:  
of the Department maxillofacial**

**surgery and surgical dentistry**

---

name of department

**S.Yu. Ivanov**

---

name and surname

---

signature

**HEAD  
OF HIGHER EDUCATION PROGRAMME:**

**Deputy Director MI RUDN  
by specialty Dentistry**

**S. N. Razumova**

---

position, department

---

signature

---

name and surname