

Документ подписан
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

Radiology

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:

31.05.03 Dentistry

higher education programme profile/specialisation title

2022-2023

1. COURSE GOAL(s)

The goal of the course "Radiology" is to equip students with the knowledge of the basics of radiological diagnostics.

2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course (module) "Radiology" is aimed at the development of the following competences /competences in part: GPC-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-5	Able to interpret the results of examinations of the patient with radiological methods to solve professional problems	GPC-5.4 . A student should able to determine radiological signs of the most common states and pathological processes of the human body
GPC-9	Being able to assess morpho-functional, physiological conditions and pathological processes in the human body to solve professional tasks	GPC-9. Being able to assess morpho-functional, physiological conditions and pathological processes in the human body to solve professional tasks GPC-9.2. Evaluating the results of clinical, laboratory and functional diagnosis in dealing with professional tasks.
PC-1	Being able to make an examination of a patient in order to determine a diagnosis.	PC-1.5. Making a preliminary/final diagnosis based on the patient examination; laboratory and instrumental examinations.

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*

GPC-5	Able to interpret the results of examinations of the patient with radiological methods to solve professional problems	Anatomy Pathological anatomy Physics	General dentistry Particular aspects of dentistry Surgical and therapeutic dentistry
GPC-9	Being able to assess morpho-functional, physiological conditions and pathological processes in the human body to solve professional tasks	Anatomy Pathological anatomy Physics	
PC-1	Being able to make an examination of a patient in order to determine a diagnosis.	-	-

4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course is 3 credits (108 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			
		6			
<i>Contact academic hours</i>	51	51			
including:					
Lectures (LC)					
Lab work (LW)					
Seminars (workshops/tutorials) (S)	51	51			
<i>Self-studies</i>	57	57			
<i>Evaluation and assessment (exam/passing/failing grade)</i>		12			
Course workload	academic	108	108		

Type of academic activities		Total academic hours	Semesters/training modules			
			6			
	hours					
	credits	3	3			

5. THE COURSE MODULES AND CONTENTS

Table 5.1. The content of the discipline and types of academic activities

Modules and Topics	Content of the topics	Type of academic activities
Module 1 The main methods of Diagnostic Radiology (general concepts)	X-ray examination method 3 hours	Lec, Lab
	Diagnostic ultrasonography 3 hours	Lec, Lab
	CT and MRI 3 hours	Lec, Lab
	The main radionuclide tests 3 hours	Lec, Lab
Module 2 Diagnostic Radiology in Dentistry	Radiographic methods for the jaw-facial region 3 hours	Lec, Lab
	Development and anatomy of teeth and jaws in X-ray imaging 3 hours	Lec, Lab
	Diagnosis of congenital and acquired deformities of the maxillofacial region 3 hours	Lec, Lab
	X-ray diagnostics of caries, pulpitis, periodontitis, paradontal diseases 3 hours	Lec, Lab
	Radiation diagnostics of traumatic injuries of the jaws and teeth. Radiation diagnostics of TMJ diseases 3 hours	Lec, Lab
	Radiation diagnostics of benign tumors and cysts of the jaws. 3 hours	Lec, Lab
	Fundamentals of the diagnosis of malignant tumors of the jaws 3 hours	Lec, Lab
	Radiation diagnostics of diseases of the salivary glands. Contrast method of X-ray examination - 3 hours	Lec, Lab

Modules and Topics	Content of the topics	Type of academic activities
	Radiation oncology - 3 hours	Lec, Lab

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 conducting lecture-type classes, equipped with a set of specialized furniture; a board (screen) and technical means of multimedia presentations.	Microsoft products (OS, office package) (Subscription Enrollment for Education Solutions (EES) No. 56278518 dated 23/04/2019) Guarantor (Agreement No. 13A/46/2018 dated 02/04/2018) Consultant Plus (Information Support Agreement dated 01/09/2013) Regt number of the central office-03-207-7474 from September.2013
Lab work	An auditorium for laboratory work, individual consultations, routine monitoring and interim certification, equipped with a set of specialized furniture and equipment.	Microsoft products (OS, office package) (Subscription Enrollment for Education Solutions (EES) No. 56278518 dated 23/04/2019) Guarantor (Agreement No. 13A/46/2018 dated 02/04/2018) Consultant Plus (Information Support Agreement dated 01/09/2013) Regt number of the central office-03-207-7474 from September.2013

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
Seminar	An auditorium for conducting seminar-type classes, group and individual consultations, ongoing monitoring and interim certification, equipped with a set of specialized furniture and multimedia presentation equipment.	Microsoft products (OS, office package) (Subscription Enrollment for Education Solutions (EES) No. 56278518 dated 23/04/2019) Guarantor (Agreement No. 13A/46/2018 dated 02/04/2018) Consultant Plus (Information Support Agreement dated 01/09/2013) Regt number of the central office-03-207-7474 from September.2013
Computer Lab	A computer classroom for conducting classes, group and individual consultations, ongoing monitoring and interim certification, equipped with personal computers (in the amount of 3 pcs.), a blackboard (screen) and multimedia presentation equipment.	Microsoft products (OS, office package) (Subscription Enrollment for Education Solutions (EES) No. 56278518 dated 23/04/2019) Guarantor (Agreement No. 13A/46/2018 dated 02/04/2018) Consultant Plus (Information Support Agreement dated 01/09/2013) Regt number of the central office-03-207-7474 from September.2013
<i>Self-studies</i>	Sets of films	Radiographs, CT, sonographic, MRI, radionuclide images

7. RESOURCES RECOMMENDED FOR COURSE STUDY

Main readings:

1. Whaites E. and DrageN. Dental Radiology and Radiography Elsevier/2013, 465 p.
2. Herring William.
Learning Radiology : recognizing the basics / W. Herring. - 4th edition - Philadelphia : Elsevier, 2020. - 382 p. : ill. - ISBN 978-0-323-56729-9 : 4730.00.
3. Pramod John R. Textbook of Dental Radiology.2nd Edition. — Jaypee Brothers, 2011. — 289.

4. Trofimova T.N., Grapach I.A., Belchikova N.S. Radiation Diagnosis in Dentistry / 2010 - 6- 186.
5. Ilasova E.B., Chekhonatskaya M.P., Priyozheva V.N. Radiation Diagnosis, 2009-, GOELAR-Medicine,-275 S.
6. Sinitsyn E.V., Ustyuzhanin D.V. Magnetic Resonance Imaging/ 2008-, 208 S.
7. Bazhanov N.N., Bieberman J.M., Efanov O.I., etc. Inflammatory diseases of the maxillofacial area and neck / Under ed. A.G. Shargorodsky. - M.: Medicine, 1985. 351s.
8. Vorobyov Y.I., A.G. X-rays of the upper jaw on orthopantograms / Dentistry. – 1989. N 6. 40-43.
9. Rabukhina N.A., Arzhantsev AP / X-ray diagnostics in dentistry. 1999.

Additional readings:

10. Wheels A.A. Facial Skeleton. - M.: Medicine. 1962. - 188c.
11. Lion N.D. The significance of the anatomical structure of the salivary glands in salivary-stone disease /Stomatology. – 1974. - N 1 C 25-28.
12. Pinus R.B. Odontogenic cysts of the maxillary sinus. Sverdlovsk: Wednesday. Url. Kn. It's a squire-go. 1968 - 180s
13. Rubachina N. Panina N.S., Dedeyan S.A. Role of X-ray examination in tooth decay / Dentistry. – 1986. - N 2. - S. 27-11.Solntsev A.M., Kolesov V.S. Cysts of the maxillofacial area and neck. Kiev, 1982. - 96s

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
 - 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 “Radiology”
2. The laboratory workshop (if any).on the course ”Radiology”

3. The guidelines for writing a course paper / project (if any) on the course “Radiology”.

* 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 (GPC-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

G.M.Zapirov

position, department

signature

name and surname

Assistant

M.V. Podolskaya

position, department

signature

name and surname

of Oncology and Diagnostic
Radiology

A.D. Kaprin

position, department

signature

name and surname

HEAD OF EDUCATIONAL DEPARTMENT:

of Oncology and Diagnostic
Radiology

A.D. Kaprin

name of department

signature

name and surname

HEAD

OF HIGHER EDUCATION PROGRAMME:

First Deputy Director of MI
for Academic Affairs

Iv. V. Radysh

position, department

signature

name and surname