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

Medical Institute

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

COURSE SYLLABUS

Health and Safety

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

2023-2024

1. COURSE GOAL(s)

The goal of the course "Health and Safety" is to equip students with the knowledge patterns of formation of hazards and measures to prevent their impact on humans.

2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course (module) "Health and Safety" is aimed at the development of the following competences /competences in part: GC-8, GPC-6, PC-1.

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

Competence code	Competence descriptor	Competence formation indicators (within this course)
GC-8	Able to create and maintain safe living conditions in everyday life and in professional activities to preserve the natural environment, ensure the sustainable development of society, including in the event of a threat and the occurrence of emergencies and military conflicts.	GC-8.1. Knows the causes, signs and consequences of hazards, methods of protection against emergency situations; basics of life safety, emergency phone numbers.
		GC -8.2. Able to identify signs, causes and conditions of emergency situations; assess the likelihood of a potential danger for the student and take measures to prevent it in the conditions of an educational institution; provide first aid in emergency situations.
		GC-8.3. Owns methods for predicting the occurrence of dangerous or emergency situations; skills to maintain safe living conditions.
		GC-8.4. Observes and explains the rules of conduct in the event of emergencies of natural and man-made origin, provides first aid, participates in recovery activities.
GPC-6	Able to organize patient care, provide primary health care, ensure the organization of work and the adoption of professional decisions in emergencies at the prehospital stage, in emergency situations, epidemics and in centers of mass destruction.	GPC-6.1. Owns an algorithm for providing first aid in emergency conditions, including in extreme conditions and foci of mass destruction.
		GPC-6.2. Able to identify conditions requiring emergency medical care, including clinical signs of a sudden cessation of blood circulation and breathing.

		GPC-6.3. Able to provide emergency medical care to patients in conditions that threaten the lives of patients, including clinical death (stopping the vital functions of the human body (blood circulation and (or) breathing).
		GPC-6.4 Provides medical care to a dental patient in urgent or emergency forms.
		GPC-6.6 Organizes personalized treatment of a dental patient, including elderly and senile patients, pregnant women, children with somatic pathologies, evaluates the effectiveness and safety of treatment.
		GPC-6.7 Prescribes medicines, medical devices, taking into account the diagnosis, age and clinical picture, and in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care.
		GPC-6.8 Prescribes non-drug treatment taking into account the diagnosis, age and clinical picture of the disease 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 standards of medical care.
PC-1	Able to conduct examination of the patient in order to establish a diagnosis.	PC-1.1 Performs primary and/or re-examination of the patient in order to establish a preliminary diagnosis.
		PC-1.2 Receives information from patients (their relatives/legal representatives), conducts a survey of patients on the subject of general health, identification of concomitant diseases in order to establish a preliminary diagnosis.
		PC-1.3 Detects dental and facial anomalies, deformities and preconditions for their development, defects in crowns of teeth and dentition in patients based on examination of the patient, laboratory, instrumental, as well as additional examinations in order to establish a preliminary / final diagnosis.

			PC-1.4 Identifies risk factors for oncopathology in patients (including various background processes, precancerous conditions) based on laboratory, instrumental and additional examinations in order to establish a preliminary / final diagnosis.
			PC-1.5 Establishes a preliminary / final diagnosis based on the examination of the patient, laboratory and instrumental studies.
			PC-1.6 Establishes the final diagnosis based on additional examinations of patients.

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course refers to the <u>core</u>/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*
GC - 8	Able to create and maintain safe living conditions in everyday life and in professional activities to preserve the natural environment, ensure the sustainable development of society, including in the event of a threat and the occurrence of emergencies and military conflicts.	-	History of medicine; Emergency Medicine; Anesthesiology, resuscitation, intensive care
GPC - 6	Able to organize patient care, provide primary health care, ensure the organization of work and the adoption of professional decisions in emergencies at the	-	Immunology; General surgery; Epidemiology; Topographic anatomy and operative surgery; Medical elementology; Faculty Surgery; Emergency

	prehospital stage, in emergency situations, epidemics and in centers of mass destruction.		Medicine; Anesthesiology, resuscitation, intensive care
PC - 1	Able to conduct examination of the patient in order to establish a diagnosis.	-	Immunology; General surgery; Topographic anatomy and operative surgery; medical rehabilitation; polyclinic therapy; infectious diseases; Pediatrics; obstetrics and gynecology

* 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 "Health and Safety" 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
Contact academic hours	*54*	*54*
including:		
Lectures (LC)		
Lab work (LW)		
Seminars (workshops/tutorials) (S)	*54*	*54*
Self-studies	*54*	*54*
Evaluation and assessment (exam/passing/failing grade)		
Course workload academic hours	*108*	*108*
credits	*3*	*3*

* 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
Module 1. Theoretical basis	**Topic 1.1.** System "Human-environment"	S
	Topic 1.2. Risks	S
	Topic 1.3. Natural emergencies	S
	Topic 1.4. Man-made emergencies	S

	Topic 1.5. Life Safety Management	S
	Topic 1.6. Monitoring as a basis for managing human life safety	S
Module 2. Dangers in everyday life	**Topic 2.1.** Rules of conduct in natural emergencies	S
	Topic 2.2. Rules of conduct in case of man-made emergencies	S
	Topic 2.3. Social emergencies	S
	Topic 2.4. Terrorism is a threat to society	S
	Topic 2.5. Harmful addictions and their social consequences	S
Module 3. Basic principles of legal support of BZ for medical workers.	**Topic 3.1.** Basic principles of legal support of BZ. The main legislative acts and standards to ensure the safety of the population.	S
	Topic 3.2. Legal bases of ecological safety.	S
	Topic 3.3. Protection of public health and safety.	S
	Topic 3.4. Responsibility for violation of regulatory legal acts on the life safety of the population.	S
Module 4. Providing first aid to those injured in an emergency	**Topic 3.5.** Fundamentals of mobilization preparation of the health care system; basics of the health care system in wartime (when mobilization is announced)	S
	Topic 4.1. Cardiopulmonary resuscitation, bleeding control, transport immobilization of the victims' limbs.	S
	Topic 4.2. The concept of desmurgy.	S
	Topic 4.3. Simulation of various emergency situations.	S
	Topic 4.4. Types of first aid kits. Filling the first aid kit.	S
	Topic 4.5. First aid for burns, frostbite, external bleeding, poisoning, injuries.	S

* - 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)
Seminar	An auditorium for seminars, individual consultations,	Set of specialized furniture, Interactive complex: Optoma interactive

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
	current control and intermediate certification, equipped with a set of specialized furniture and equipment (room 330 ATI)	whiteboard with TRIUMPH BOARD /X316 DPL projector (Fuii 3D), XGA (1024*768), 3200 ANSI Lm, 20, Software: Microsoft products (OS, office suite, including MS Office/Office 365, Teams); Robot trainers. First aid kit.
Self-studies	An auditorium for independent work of students (can be used for laboratory classes and consultations), equipped with a set of specialized furniture (audience 243 ATI)	Set of specialized furniture, Interactive complex: Optoma interactive whiteboard with TRIUMPH BOARD /X316 DPL projector (Fuii 3D), XGA (1024*768), 3200 ANSI Lm, 20, Software: Microsoft products (OS, office suite, including MS Office/Office 365, Teams)

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

7. RESOURCES RECOMMENDED FOR COURSE STUDY

Main readings:

1. **Life safety**: textbook / N.V. Kosolapova, N.A. Prokopenko - Electronic text data. - M.: KnoRus, 2017, 2021. - 247 p. - (Bachelor's degree).
2. **Life safety**: textbook / I.P. Levchuk, A.A. Burlakov. - 2nd ed., revised. and additional ; Electronic text data. - Moscow: GEOTAR-Media, 2020. - 160 p.

Additional readings:
1. Life safety. Theory and practice. Under total ed. POISON. Vishnyakova. - 4th ed., revised. and additional - M. : Yurayt, 2015. - 543 p.
2. Belov Sergey Viktorovich. Life safety and environmental protection (technospheric safety): Textbook for bachelors - 4th ed., revised. and additional - M. : Yurayt, 2013. - 682 p.
3. Belov Sergey Viktorovich. Life safety and environmental protection (technospheric safety): Textbook for universities - 2nd ed., Corrected. and additional - M.: Yurayt, 2011. - 680 p.
4. Kryuchek N.A., Latchuk V.N., Mironov S.K. Security and protection of the population in emergency situations: A textbook for the population - M.: Publishing house of NC ENAS, 2001. - 264 p.
5. How to Survive a Disaster: A Study Guide Series: Emergency Extras small situations.Chumakov B. N., 2005, Publisher: PEDAGOGICAL SOCIETY OF RUSSIA (CENTRAL COUNCIL).
6. Protection of the population and territories from emergencies / S.A. Bulanenkov, S.I. Voronov, P.P. Gubchenko and others; Under total Ed. M.I. Faleev. - Kaluga: State Unitary Enterprise "Oblizdat", 2001.
7. All the worst that can happen to you. Encyclopedia of extreme situations. - M.: "RIPOL CLASSIC", 2001. - 320 p.

Internet sources:

1. RUDN ELS and third-party ELS, to which university students have access on the basis of 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
- EBS "Student Advisor" www.studentlibrary.ru
- EBS "Lan" http://e.lanbook.com/

2. Databases and search engines:

- NCBI: https://p.360pubmed.com/pubmed/
- Bulletin of RUDN University: access mode from the territory of RUDN University and remotely http://journals.rudn.ru/
- Scientific library Elibrary.ru: access to RUDN University IP addresses at: http://www.elibrary.ru/defaultx.asp
- ScienceDirect (ESD), "FreedomCollection", "Cell Press" ID "Elsevier". There is remote access to the database, access to RUDN University IP addresses (or remotely using an individual login and password).
- Google Academy (English Google Scholar) -free search engine for full texts of scientific publications of all formats and disciplines. Indexes full texts of scientific publications. Access mode: https://scholar.google.ru/
- Scopus-scientometric database of publishing house "Elsevier". Access to the platform is carried out by RUDN University IP addresses or remotely. http://www.scopus.com/
- web of science. Access to the platform is carried out by RUDN University IP addresses or remotely. http://login.webofknowledge.com/

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

1. The set of lectures on the course "Health and Safety"

* 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-8, GPC-6, PC-1) 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).

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