Khanty-Mansiysk Autonomous Okrug-Ugra "Surgut State University"

Deputy Rector for Academic Affairs

\_ E.V. Konovalova

"13" June 2024, Record № 5

# Life safety

## Syllabus

Department	Life safety	
Curriculum	s310501-ЛечДелоИн-24-1.plx Specialty 31.05.01 Medicine	
Qualification	General Practitioner	
Form of education	Full-time	
Total (in credits)	2	
Total academic hours including:	72	Control: Credit/Mark, 2 <sup>nd</sup> term
Classes	48	
Control hours	24	

Academic year (Term)	2 (2	2 (1.2)		Total	
Weeks	17 2/6				
Types of classes	Cur	Syl	Cur	Syl	
Lectures	32	32	32	32	
Practical	16	16	16	16	
Contact	48	48	48	48	
Self-study	48	48	48	48	
Total	24	24	24 24		
Academic year	72	72	72	72	

### Распределение часов дисциплины по семестрам

УП: s310501-ЛечДелоИн-24-1.plx

The Syllabus is compiled by: *assistant, Yaremenko D.A.* 

The Syllabus Life safety

Developed in accordance with Federal State Educational Standard: Federal State Educational Standard of higher education in the specialty 31.05.01 General medicine (Order of the Ministry of Education and Science of the Russian Federation on 12.08.2020 №.988)

Based on the Curriculum: 31.05.01 GENERAL MEDICINE Specialization: General Medicine Approved by the Academic Council of Surgut State University, 13.06.2024 Record №. 5

The Syllabus was approved by the department Life safety

Head of Department, Doctor of Biology, Associate Professor Maistrenko E.V.

#### **1. COURSE OBJECTIVES**

1.1 The course aim is to form among the students the professional safety culture which is understood as mastering universal competencies by a personality to provide safety in the field of professional activity and to successfully solve professional tasks which consider safety issues to be a priority.

## 2. COURSE OVERVIEW

Course	code (in curriculum): B1.O.01				
2.1	2.1 Assumed background:				
2.1.1	Physics, Mathematics				
2.1.2	Chemistry				
2.1.3	Human anatomy				
2.1.4	Biology				
2.2	Post-requisite courses and practice:				
2.2.1	Disaster Medicine				

#### 3. COMPETENCES UPON COMPLETION OF THE COURSE (MODULE)

UC-8.1: Identifies harmful and dangerous factors of the environment

UC-8.2: Selects means of protection against the effects of harmful and dangerous factors in the framework of the activity

UC-8.3: Provides safe conditions for life and work

UC-8.4: Explains the rules of behavior in case of emergencies of natural and man-made origin

UC-8.5: Provides first aid

#### By the end of the course students must:

3.1	Know:
	the main techno-sphere hazards, their properties and features, the impact character of harmful and dangerous factors on human beings and natural environment, methods of protection from them applied to their professional sphere
3.2	Be able to:
	identify the main hazards of human natural environment, estimate the risks of their realization, choose methods of protection from them applied to their professional sphere and techniques of providing comfortable conditions of life activity

4. STRUCTURE AND CONTENTS OF THE COURSE (MODULE)						
Class Code Class C						
			Code			
	Section 1. Introduction to Life safety					

1.1	Introduction to safety /Lecture/	2	4	UC-8.1	L1.1 L1.2 L2.1 E1 E2	
1.2	Assessment of exposure to harmful substances contained in the air /Pr/	2	2	UC-8.1	L1.1 L1.2 L3.1 L3.3 E1 E2	
1.3	The concept of the safety of human life. Basic terms and definitions. /Self-study/	2	4	UC-8.1	L1.1 L1.2 L2.1 E1 E2	
	Section 2. Human beings and technosphere					
2.1	Human beings and technosphere /Lecture/	2	4	UC-8.1 UC- 8.2 UC-8.3	L1.1 L1.2 L2.1 E1 E2 E4	
2.2	Investigation and accounting of accidents at work /Pr/	2	2	UC-8.1 UC- 8.2 UC-8.3	L1.1 L1.2 L3.1 L3.3 E1 E2 E4	
2.3	Structural elements of the technosphere from the standpoint of the technosphere as a natural and artificial phenomenon	2	2	UC-8.1 UC- 8.2 UC-8.3	L1.1 L1.2 L2.1 E1 E2 E4	
	Section 3. Identification and impact of harmful and dangerous factors of the environment on hyman beings					
3.1	Identification and impact of harmful and dangerous factors of the environment on hyman beings /Lecture/	2	4	UC-8.2 UC- 8.3 UC-8.4	L1.1 L1.2 L2.1 E1 E2 E3 E4	
3.2	Evacuation of people in case of fire /Pr/	2	2	UC-8.2 UC- 8.3 UC-8.4	L1.1 L1.2 L3.1 L3.3 E1 E2 E3	
3.3	Classification of dangerous and harmful factors. /Self-study/	2	2	UC-8.2 UC- 8.3 UC-8.4	L1.1 L1.2 L2.1 E1 E2 E3 E4	
	Section 4. Protection of human beings and environment from harmful and dangerous factors of natural, an- thropogenic and technogenic origin					
4.1	Protection of human beings and environment from harmful and dangerous factors of natural, an-thropogenic and technogenic origin /Lecture/	2	4	UC-8.1 UC- 8.5	L1.1 L1.2 L2.1 L3.2 E1 E2	
4.2	Colour signal and safety signs. /Pr/	2	2	UC-8.1 UC- 8.5	L1.1 L1.2 L3.1 L3.2 L3.3 E1 E2	
4.3	The main causes of domestic and workplace injuries. /Self-study/	2	2	UC-8.1 UC- 8.5	L1.1 L1.2 L2.1 L3.2 E1 E2	
	Section 5. Providing a comfortable environment for human life and activities					
5.1	Providing a comfortable environment for human life and activities /Lecture/	2	4	UC-8.1 UC- 8.2 UC-8.3	L1.1 L1.2 L2.1 L3.1 L3.3	
5.2	Means of personal respiratory protection. /Pr/	2	2	UC-8.1 UC- 8.2 UC-8.3	L2.1 L3.1 L3.3	
5.3	Motivation of activity. /Self-study/	2	2	UC-8.1 UC- 8.2 UC-8.3	L1.1 L1.2 L2.1	
	Section 6. Psychophysiological and ergonomic safety basics					

				1		
6.1	Psychophysiological and ergonomic safety basics /Lecture/	2	4	UC-8.1 UC- 8.2 UC-8.3	L1.1 L1.2 L2.1 L3.1 L3.3	
6.2	Assessment of compliance of the workplace with sanitary and hygienic standards /Pr/	2	2	UC-8.1 UC- 8.2 UC-8.3	L2.1 L3.1 L3.3	
6.3	Mental processes and conditions /Self-study/	2	2	UC-8.1 UC- 8.2 UC-8.3	L1.2 Л1.1 L2.1	
	Section 7. Emergency and protection methods in terms of their implementation					
7.1	Emergency and protection methods in terms of their implementation /Lecture/	2	4	UC-8.1 UC- 8.2 UC-8.4	L1.1 L1.2 L2.1	
7.2	Hygienic assessment of working conditions on industrial dust /Pr/	2	2	UC-8.1 UC- 8.2 UC-8.3	L2.1 L3.3 L3.1	
7.3	General information about emergency situations. /Self-study/	2	2	UC-8.1 UC- 8.2 UC-8.4	L1.1 L1.2 L2.1	
	Section 8. Life safety management					
8.1	Life safety management /Lecture/	2	4	UC-8.1 UC- 8.2 UC-8.3 UC-8.4	L1.1 L1.2 L2.1 L3.1	
8.2	Calculation of the required air exchange in general ventilation /Pr/	2	2	UC-8.1 UC- 8.2 UC-8.3 UC-8.4	L2.1 L3.3 L3.1	
8.3	General aspects of management. /Self-study/	2	4	UC-8.1 UC- 8.3 UC-8.4	L2.1 L3.1 L3.3	
8.4	/Test/	2	2		L1.1 L1.2 L2.1 L3.1 L3.2 L3.3 E1 E2 E3 E4	
8.5	/ Credit/mark/	2	2	UC-8.1 UC- 8.2 UC-8.3 UC-8.4 UC- 8.5		

5. ASSESSMENT TOOLS	
5.1. Assessment tools for midterm assessment	
Presented by a single document	
5.2. Assessment tools for diagnostic testing	
Presented by a single document	

	6. COURSE (MODULE) RESOURCES							
	6.1. Recommended Literature							
		6.1.1. Core						
	Authors	Title	Publish., year	Quantity				
L1.1	Belov S.V.	Life safety and environmental protection (technosphere safety) in 2 volumes. Volume 1: Student's Book	M.: Publishing office Urite, 2016 electronic resource	1				
L1.2	Belov S.V.	Life safety and environmental protection (technosphere safety) in 2 volumes. Volume 2: Student's Book 6.1.2. Supplementary	M.: Publishing office Urite, 2016	1				
	Authors	Title	Publish., year	Quantity				

	Authors	Title	Publish., year	Quantity		
L2.1	Yeremenko V.D., Ostapenko V.S.	Life Safety: Course manual	Moscow: Russian State University of Justice, 2016, electronic resource	1		
		6.1.3. Methodical development				
	Authors	Title	Publish., year	Quantity		
L3.1	Maistrenko E.V., Andreeva T.S., Ibragimova N. I., Gapulenko T. O.	Life safety: teaching aid	Surgut: Publishing Center of SSU, 2014	42		
L3.2	Andreeva T.S., Gapulenko T. O., Maistrenko E.V., Ibragimova N. I., Fomina E.R.	Fundamentals of first aid: teaching aid	Surgut: Publishing Center of SSU, 2018, electronic resource	2		
L3.3	Maistrenko E.V., Andreeva T.S., Ibragimova N. I., Gapulenko T. O.	Life safety: teaching aid	Surgut: Publishing Center of SSU, 2014, electronic resource	2		
		6.2. Internet resources				
E1	https://www.mchs.go	ov.ru/				
E2	http://window.edu.ru	/resource/009/67009				
E3	https://mosobl.sledcom.ru/instructions/item/606633/					
E4	http://www.maneb.ru/					
		6.3.1 Software				
6.3.1		Microsoft, applied programmes pack Microsoft Office				
6.3.1	.2 Internet access (Wi-					
		6.3.2 Information Referral systems				
6.3.2	.1 E-data bases: 'Garan	nt', 'Consultant Plus', 'Consultant-Region'				

## 7. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE (MODULE)

7.1 The lecture halls, classrooms for discussions (practical classes), group and individual consultations, formative and midterm assessment are equipped with: typical furniture for studies, technical pieces of equipment for providing educational material