

Approved by
Deputy Rector for Academic Affairs

_____ E.V. Konovalova

“15” June 2023, Record № 5

Life safety

Syllabus

Department **Life safety**
Curriculum s310501-ЛечДелоИИ-23-1.plx
Specialty 31.05.01 Medicine

Qualification **General Practitioner**
Form of education **Full-time**
Total (in credits) **2**

Total academic hours 72
including:
Classes 64
Control hours 8

Control:
Credit/Mark, 2nd term

Course outline in terms

Academic year (Term)	2 (1.2)		Total	
	Cur	Syl		
Weeks	17 2/6			
Types of classes	Cur	Syl	Cur	Syl
Lectures	32	32	32	32
Practical	32	32	32	32
Contact	64	64	64	64
Self-study	8	8	8	8
Total	72	72	72	72

The Syllabus is compiled by:
Senior Lecturer, Vasilyeva A.Yu. _____

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, 15.06.2023 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

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| 1.1 | The aim of the course is to form among the students the professional safety culture which is understood as mastering universal competences 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. |
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2. COURSE OVERVIEW

Course code (in curriculum):	B1.O.01
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)

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| 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:	
3.1.1	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:	
3.2.1	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
3.3 Have skills of:	
3.3.1	applying legislative and regulatory acts in environmental safety and protection sphere, requirements to the safety of technical regulations in the professional sphere; ways and technologies of protection in the emergency situations; notional and terminological scope in the field of safety; skills of professional activity rationalization in order to provide environmental safety and protection

4. STRUCTURE AND CONTENTS OF THE COURSE (MODULE)

Class Code	Topics /Class type	Term / Academic	Academic hours	Competences	Literature	Interactive
	Section 1. Introduction to Life safety					
1.1	Introduction to Life 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	Estimation of drinking water quality /Pr/	2	2	UC-8.1	L1.1 L3.1 L3.3	
1.4	The concept of human life safety. Basic terms and definitions. /Self-study/	2	0,5	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	First aid in case of accidents /Pr/	2	2	UC-8.1 UC-8.2 UC-8.3 UC-8.5	L1.1 L1.2 L3.1 L3.3	
2.4	Structural elements of the technosphere from the standpoint of the technosphere as a natural and artificial phenomenon /Self-study/	2	0,5	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 human beings					
3.1	Identification and impact of harmful and dangerous factors of the environment on human 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	Basics of protection against ionizing radiation /Pr/	2	2	UC-8.2 UC-8.3 UC-8.4	L3.1 L3.3	
3.4	Classification of dangerous and harmful factors. /Self-study/	2	0,5	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, anthropogenic and technogenic origin					
4.1	Protection of human beings and environment from harmful and dangerous factors of natural, anthropogenic 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	Fire extinguishing ways and means. /Pr/	2	2	UC-8.1 UC-8.2 UC-8.3		
4.4	The main causes of domestic and workplace injuries. /Self-study/	2	0,5	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	Assessment of the labour process intensity. /Pr/	2	2	UC-8.1 UC-8.2 UC-8.3	L2.1 L3.1 L3.3	
5.4	Motivation of activity. /Self-study/	2	0,5	UC-8.1 UC-8.2 UC-8.3	L1.1 L1.2 L2.1	
	Section 6. Psychophysiological and ergonomic safety basics					
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 the workplace compliance 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	Hygienic aspects of work with personal computers /Pr/	2	2	UC-8.1 UC-8.2 UC-8.3	L2.1 L3.3 L3.1	
6.4	Mental processes and conditions /Self-study/	2	0,5	UC-8.1 UC-8.2 UC-8.3	L1.2 JI1.1 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	Calculation of the lighting installation in the production area /Pr/	2	2	UC-8.1 UC-8.2 UC-8.3	L2.1 L3.3 L3.1	
7.4	General information about emergency situations. /Self-study/	2	0,5	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	Determination of noise level in residential areas /Pr/	2	2	UC-8.1 UC-8.2 UC-8.3 UC-8.4	L2.1 L3.1 L3.3	
8.4	General aspects of management. /Self-study/	2	0,5	UC-8.1 UC-8.3 UC-8.4	L2.1 L3.1 L3.3	
8.5	/Test/	2	2	UC-8.1 UC-8.2 UC-8.3 UC-8.4 UC-8.5	L1.1 L1.2 L2.1 L3.1 L3.2 L3.3 E1 E2 E3 E4	
8.6	/Credit/mark/	2	2	UC-8.1 UC-8.2 UC-8.3 UC-8.4 UC-8.5	L1.1 L1.2 L2.1 L3.1 L3.2 L3.3 E1 E2 E3 E4	

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	1
L1.2	Belov S.V.	Life safety and environmental protection (technosphere safety) in 2 volumes. Volume 2: Student's Book	M.: Publishing office Urite, 2016	1

6.1.2. Supplementary

	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.gov.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

6.3.1.1	Operational system Microsoft, applied programmes pack Microsoft Office
6.3.1.2	Internet access (Wi-Fi)

6.3.2 Information Referral systems

6.3.2.1	E-data bases: 'Garant', 'Consultant Plus', 'Consultant-Region'
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7. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE (MODULE)

7.1	Classrooms for practical classes, group and individual consultations, monitoring and intermediate certification are equipped with: typical classroom furniture, technical teaching aids, employees for the presentation of educational information.
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