Syllabus of the educational discipline

«LIFE SAFETY AND FUNDAMENTALS OF LABOR PROTECTION»

Cycle of Higher Education	*First cycle of higher education (Bachelor's degree)*
Field of Study	*12 Information Technologies*
Specialty	*123 Computer engineering*
Educational program	*Computer systems and networks*
Discipline status	*Normative*
Teaching language	*English*
Year of studies, semester	*4 year (7 semester)*
Number of credits ECTS	*3 credits*
Distribution by types of trainings and hours of study	*Lectures, Practice studies, Independent training*
Form of final assessment	*Exam*
Teacher	*Tsigika V.V., senior lecturer of department of computer systems and networks*
Teacher's contacts	*volodymyr.tsyhyka@uzhnu.edu.ua*
Course Schedule	*According to the timetable*

The purpose of studying the discipline "Life safety and basics of labor protection" is the assimilation of such issues as the classification and general patterns of hazards, their properties, the consequences of the impact on the human body; theoretical foundations of life safety, in particular, the types of risk, methods of its determination and reduction; basics of protecting human health and life and the environment from the dangers of both routine and in emergency situations. Particular attention is paid to the study of the characteristics of such anthropogenic factors of impact on life activities, such as noise, vibration, electromagnetic and ionizing radiation, as well as methods and instruments of environmental monitoring.

As a result of studying the discipline the student must:

know:

- Knowledge and understanding of social, environmental, moral, economic aspects, labor protection requirements, industrial sanitation and fire safety.

- Knowledge of international standards in the field of labor protection; basic legislative and normative legal acts on labor protection; labor protection management system

be able to:

- take into account the requirements of occupational safety, industrial sanitation, fire safety, environmental protection, safety of life when forming technical solutions; collect and analyze scientific and technical information on safety and health at work.

Prerequisites for learning

Programming, Discrete Mathematics, Theoretical Foundations of Digital Signal Processing.

Content of the educational discipline

Topic 1. Introduction. Theoretical foundations of Life Safety
Topic 2. Hazards of life in the production sphere and at home.
Topic 3. Nature, Sources and Consequences of Ionizing Radiation Influences on the Human Body
Topic 4. Biomedical and Social Health Problems
Topic 5. Living in Today's Urbanized Environment
Topic 6. Life safety in emergency situations
Topic 7. Legal and organizational issues of labor protection
Topic 8. Analysis, forecasting, prevention of injuries and occupational diseases
Topic 9. Fundamentals of physiology, occupational health, and industrial hygiene
Topic 10. Fundamentals of safety technology. General safety requirements for technical equipment and processes
Topic 11. Electrical Safety.
Topic 12. Fire safety.

Course page on the Moodle platform (personal training system)	*Syllabus of the educational discipline, hyperlinks to electronic publications of the discipline, recommended literature, students' attendance, lecture materials, presentations, questions for self-control, methodical materials for laboratory works, tests, tasks for checking students' knowledge. https://moodle.uzhnu.edu.ua*

Recommended literature

1. *JCR The Joint Commission/NFPA Life Safety Book for Health Care Organizations. - CR Publishing, 2018. - 300p*
2. *Joint Commission The Life Safety Book. - Joint Commission Resources; 1st edition, 2009. - 232p..*
3. *Mark A. Friend Fundamentals of Occupational Safety and Health. - Bernan Press; Seventh edition, 2018. - 616p.*

Assessment system of learning outcomes

Knowledge control is carried out in two modules. For the control of knowledge a list of theoretical questions, tasks for independent work, with the content of which students are familiarized at the beginning of the semester is developed. Each module is assessed by a maximum of 100 points. At the end of each semester a rating score, defined as the arithmetic average of the points from the two modules, is derived.

ECTS and national grading scale

Mark scale	ECTS	Exam	Test
90 - 100	A	Excellent	Satisfied
82 - 89	B	Good	
74 - 81	C		
64 - 73	D	Satisfactory	
60 - 63	E		
35 - 59	FX	“Unsatisfactory” with possibility to pass the exam again	“Not satisfied” with possibility to pass the exam again
1 - 34	F	“Unsatisfactory” with obligatory repeated study of the discipline	“Not satisfied” with obligatory repeated study of the discipline