

Course Description

Discipline: Radiation and Chemical Protection

Training programme for university staff “Technosphere safety”

Department of Ecology and Life Safety

Lecturer Yury V.Borodin, PhD

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Learning Outcomes:

Course Objectives and Content:

The objective of the course “Radiation and Chemical Protection” is to develop professional competence, which means the readiness and ability of the individual to use an obtained set of knowledge and skills to ensure safety in the area of professional activity, in which issues of radiation and chemical protection are considered as a priority.

By the end of the course, students will study the fundamentals of radiation and chemical safety radiographic and chemical inspection safety techniques. Students will study the causes of radiation and chemical accidents and pertinent federal and state regulations. Students will study the organization and planning of population and territory protection from the effects of radiation and chemical damage.

Course Outline:

Section 1. Radiation Chemistry

Section 2. Radioactive materials

Section 3. Dangerous Chemicals

Section 4. Radiation and chemical reconnaissance and control

Section 5. Protection of population and territories after destroying of radiation and chemical facilities

Section 6. Methods for decontamination and disposal of hazardous chemicals Section 7. Modal verbs

Course Delivery: seventh semester, 18 weeks

Prerequisites: Physics, Chemistry, Health and Safety

Co-requisites: Academic research

Final Assessment: exam

Course Developer: Yury V.Borodin, PhD