

RADIATION DOSIMETRY

ANNOTATION TO THE CURRICULUM OF A HIGHER EDUCATION INSTITUTION

Specialty: 6-05-0716-03 Information and measuring devices and systems Information and measuring devices and systems

Profiling: Information systems and technologies for non-destructive testing and diagnostics

	Form of higher education	
	Full-time (day)	Correspondence
Course	3	3
Term	6	6
Lectures, hours	16	4
Laboratory Classes, hours	16	4
Credit, semester	6	6
Classroom hours for the academic discipline	32	8
Independent work, hours	40	64
Total hours/credits	72/2	72/2

1. The discipline "Radiation Dosimetry" includes theoretical and practical principles of registration and measurement of ionizing radiation of various natures, as well as the principles of radiation safety.

2. Course learning outcomes

Upon completion of the course, students will be expected to

to know:

a modern electronic database of dosimetric and radiometric monitoring devices, the nature and characteristics of physical phenomena occurring in detectors for recording ionizing radiation, as well as their units of measurement, and ways to improve the metrological characteristics of methods and means of monitoring the radiation environment.

be able to:

develop equipment for monitoring, develop technology for dosimetric and radiometric monitoring of materials and products, metrological support for technical equipment, conduct monitoring of the radiation environment.

have the skill:

rational choice of dosimetric and radiometric monitoring tools, universal technical means of dosimetric monitoring, methods of information processing during dosimetric monitoring.

3. Competencies: Be able to carry out penetrant inspection process technology.

4. Requirements and forms of current and midterm certification: test; defense of laboratory work. Midterm certification – credit. Format – oral and written.