

COURSE DESCRIPTOR

| № | Topic | Total, hours | Lectures, hours | Workshops (seminars), hours | Labs, hours | Self-study of the material, hours | Individual tasks, hours |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|-----------------------------|-------------|-----------------------------------|-------------------------|
| full-time course form of study | | | | | | | |
| Module 1. Radiation therapy. General issues of diagnostic radiology. | | | | | | | |
| 1 | The main properties of ionizing radiation and its biological action. Radioactivity and dose. Dosimetry. | 3 | 0 | 2 | 0 | 1 | 0 |
| 2 | Principles and methods of radiation therapy. | 4 | 0 | 2 | 0 | 2 | 0 |
| 3 | Physical and technical bases of X-ray diagnostic. | 6 | 2 | 2 | 0 | 2 | 0 |
| 4 | Physical and technical bases of radionuclide diagnostic. | 4 | 0 | 2 | 0 | 2 | 0 |
| 5 | Physical and technical bases of magnetic resonance imaging (MRI). | 4 | 0 | 2 | 0 | 2 | 0 |
| 6 | Ultrasound diagnostic methods. | 3 | 0 | 2 | 0 | 1 | 0 |
| 7 | Fundamentals of radiological, radionuclide CT and ultrasound and MRI semiotics of pathology of various organs and systems. | 2 | 0 | 2 | 0 | 0 | 0 |
| 8 | Radiological diagnostic methods and radiological anatomy of the thoracic cavity. | 6 | 2 | 2 | 0 | 2 | 0 |
| 9 | Bases of radiological semiotics of pathology of the respiratory and cardiovascular systems. | 4 | 0 | 2 | 0 | 2 | 0 |
| 10 | Radiological diagnostic methods and radiological anatomy of abdominal organs. | 6 | 2 | 2 | 0 | 2 | 0 |
| 11 | Radiological signs of emergencies. | 2 | 0 | 2 | 0 | 0 | 0 |
| 12 | Radiological study of the urinary system. radiological radiation anatomy and physiology of the genitourinary system. | 3 | 0 | 2 | 0 | 1 | 0 |
| 13 | Radiological study of the musculoskeletal system. Age features of the musculoskeletal system. | 5 | 2 | 2 | 0 | 1 | 0 |
| Module 2. Radiological diagnostic of diseases of separate organs and systems. | | | | | | | |
| 1 | Radiological diagnosis of congenital malformations and non-inflammatory diseases of the respiratory system (occupational diseases, cancer). | 6 | 2 | 2 | 0 | 2 | 0 |
| 2 | Radiological diagnosis of non-specific and specific inflammatory diseases of the respiratory system. | 4 | 0 | 2 | 0 | 2 | 0 |

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| 3 | Radiological signs of diseases of the cardiovascular system. Radiological diagnostic of congenital and acquired heart defects. X-ray picture depending on hemodynamic changes. | 3 | 0 | 2 | 0 | 1 | 0 |
| 4 | Radiological signs of some diseases of the kidneys and urinary tract. | 4 | 0 | 2 | 0 | 2 | 0 |
| 5 | Radiological examination of the breast and thyroid gland. Radiological signs of breast and thyroid diseases. | 3 | 0 | 2 | 0 | 1 | 0 |
| 6 | Radiological signs of diseases of the gastrointestinal tract. | 2 | 0 | 2 | 0 | 0 | 0 |
| 7 | Radiological signs of liver and biliary tract diseases. | 3 | 0 | 2 | 0 | 1 | 0 |
| 8 | Radiological diagnosis of inflammatory diseases and oncological diseases of the musculoskeletal system. | 3 | 0 | 2 | 0 | 1 | 0 |
| 9 | Radiological diagnostic of traumatic diseases and congenital malformations of the musculoskeletal system. | 3 | 0 | 2 | 0 | 1 | 0 |
| 10 | Radiological methods of central nervous system (CNS) diagnostic. Radiological signs of diseases and injuries of the CNS. | 3 | 0 | 2 | 0 | 1 | 0 |
| 11 | Differential diagnosis of diseases. Control of practical skills. | 2 | 0 | 2 | 0 | 0 | 0 |
| 12 | Control module | 2 | 0 | 2 | 0 | 0 | 0 |
| <i>Total (full-time course form of study)</i> | | <i>90</i> | <i>10</i> | <i>50</i> | <i>0</i> | <i>30</i> | <i>0</i> |