


|   |   |   |
|---|---|---|
| ОҢТҮСТІК-ҚАЗАҚСТАН<br><b>MEDISINA</b><br><b>AKADEMIASY</b><br>«Оңтүстік Қазақстан медицина академиясы» АҚ | <br><b>SKMA</b><br>-1979- | SOUTH KAZAKHSTAN<br><b>MEDICAL</b><br><b>ACADEMY</b><br>АО «Южно-Казakhstanская медицинская академия» |
| Department of Phtziopulmonology and radiology   |   | 044-70/16   |
| Syllabus: «Visual diagnostic»   |   | стр. из 24  |

## Educational program 6B10101 "General Medicine", 5-course

|           |  |  |                            |
|-----------|--|--|----------------------------|
| <b>1.</b> | <b>General information about the discipline</b>  |  |                            |
| 1.1       | Discipline code: VD 5202   | 1.6  | Academic year: 2024-2025   |
| 1.2       | Discipline name "Visual diagnostic"  | 1.7  | Course: 5                  |
| 1.3       | Prerequisites: fundamentals of radiation diagnostics   | 1.8  | Semester:9                 |
| 1.4       | Post requisites: general practitioner  | 1.9  | Amount of credits(ECTS): 4 |
| 1.5       | Cycle; VD  | 1.10   | Component : VK             |
| <b>2.</b> | <b>Course disception( 150 words)</b>   |  |                            |
|           | <p>X ray of organs and systems. Clinical and radiological syndromes, diagnostic algorithms for diseases and injuries of internal organs, features in children and adolescents. Possibilities of X-ray, ultrasound, CT, MRI in diagnostics of benign and malignant tumors of organs and systems. Preclinical radiation diagnostics. Main radiological symptoms and syndromes, differential diagnostics, image interpretation, occupational safety. Documentation of medical services processes.</p> |  |                            |
| <b>3.</b> | <b>Summative assessment form</b>   |  |                            |
| 3.1       | Testing ✓  | 3.5  | Coursework                 |
| 3.2       | Writing  | 3.6  | Essay                      |
| 3.3       | Oral   | 3.7  | Project                    |
| 3.4       | SPE / OSKE or practical skills reception ✓   | 3.8  | Another(specify)           |
| <b>4.</b> | <b>Discipline aims</b>   |  |                            |
|           | <p>To develop graduates' knowledge and skills in conducting effective events on radiological diagnostics of diseases and damage to organs and systems, observing measures to protect patients and health workers; to apply practical and communication skills to evaluate research results in accordance with the principles of the evidence base, ensuring further successful application in clinical practice.</p>   |  |                            |
| <b>5.</b> | <b>Final learning outcomes (LO disciplines)</b>  |  |                            |
| LO 1. 2   | LO 4 Conducts effective activities aimed at diagnostics, treatment, prevention of common and early forms of diseases   |  |                            |
| LO 3.     | LO 7 Applies scientific principles, methods and knowledge in medical practice and research. Capable of continuous self-education and development. Introduces new methods into clinical practice.   |  |                            |
| LO 4.     | LO 8 Complies with the standards for the implementation of public health protection, sanitary and hygienic regime of the healthcare organization and epidemiological safety of the environment, labor safety standards in the healthcare organization  |  |                            |
| LO 5      | LO 10 Works in the electronic databases of the healthcare system of the Republic of Kazakhstan, ensures documentation of the processes of providing medical services.  |  |                            |
| 5.1       | LO discipline  | The learning outcomes of the EP related to the discipline RO   |                            |
|           | LO 1   | LO 1 Provides patient-centered care in the field of biomedical, clinical, epidemiological and social-behavioral sciences for the |                            |
|           | LO 2   |  |                            |
|           | LO 3   |  |                            |



|                                      |   |  |                            |                       |                                       |                           |
|--------------------------------------|---|--|----------------------------|-----------------------|---------------------------------------|---------------------------|
|                                      | LO 4  | most common diseases.  |                            |                       |                                       |                           |
|                                      | LO 5  | LO 4 Conducts effective activities aimed at diagnostics, treatment, prevention of common and early forms of diseases.<br>LO 3 Complies with the rules of ethics, deontology and subordination, demonstrates interpersonal and communication skills leading to effective exchange of information and cooperation with patients, their families and health workers.<br>LO 10 Works in electronic databases of the healthcare system of the Republic of Kazakhstan, ensures documentation of the processes of rendering medical services. |                            |                       |                                       |                           |
| <b>6. Details of the discipline</b>  |   |  |                            |                       |                                       |                           |
| 6.1                                  | Shymkent, Clinika "Tynik" 6 Ryskulova 33 st, , email address - el_nur2@mail.ru  |  |                            |                       |                                       |                           |
| 6.2                                  | Number of hours   | Lecture  | Pract.lessons.             | Lab.lesson s.         | SIW                                   | SIW (with teacher)        |
|                                      |   | 10   | 30                         | -                     | 12                                    | 68                        |
| <b>7. Information about teachers</b> |   |  |                            |                       |                                       |                           |
| №                                    | Full name   | Degree and profession  | email                      | Scientific interests. | Achevements                           |                           |
| 1.                                   | Amangeldieva Zhibek Nurtasovna  | assistant department   | visual_diagnostics@mail.ru |                       | Radiologist                           |                           |
| 2.                                   | Abduvachabova Gulnar  | assistant department   |                            |                       | ultrasonologist                       |                           |
| 3                                    | Khamidulla Sakhar   | assistant department   | sseet321@gmail.com         | Abdominal ultrasound  | higher category, ultrasonologist      |                           |
| <b>8. Thematic plan</b>              |   |  |                            |                       |                                       |                           |
| A week/day                           | Topic name  | Summary  | RO disciplines             | Number of hours       | Forms/Methods/ learning technologies  | Forms/ assessment methods |
| 1                                    | <b>Lecture.</b> Radiation diagnostics of diseases and injuries of the lungs and mediastinum. Radiation research methods | Radiation diagnostics of diseases and injuries of the lungs and mediastinum. Radiation research methods  | LO 1                       | 1                     | Overview - illustrative, presentation | Feedback                  |
|                                      | <b>Practical lesson.</b>  | Radiation diagnosis of   | LO 1                       | 3                     | discussion, work                      | oral                      |



|          |   |   |      |     |   |  |
|----------|---|---|------|-----|---|--|
|          | Radiation diagnostics of diseases and injuries of the lungs and mediastinum. Radiation research methods. Native X-ray methods. Radiography. Fluorography. Fluoroscopy. General shadow picture of the chest. Special radiopaque techniques. Bronchography. Angiopulmography. Pneumomediastinography. Pleurography. Fistulography | diseases of the lungs and mediastinum. Radiation research methods. Native X-ray methods. Radiography. Fluorography. Fluoroscopy. General shadow picture of the chest. Special radiopaque techniques. Bronchography. Angiopulmography. Pneumomediastinography. Pleurography. Fistulography |      |     | with the provided images, work in small groups  | questioning, description of pictures, solving test tasks, solving crosswords   |
|          | <b>SIW.</b> X-ray manifestations of chronic pneumonia.  | X-ray manifestations of chronic pneumonia.  | LO 4 | 1/7 | preparation of presentations, drawing up crosswords, test tasks, situational tasks, work with an electronic X-ray - radiological atlas. | protection of presentations, solving crosswords, test tasks, situational tasks, work with an electronic X-ray - radiological atlas |
| <b>2</b> | <b>Lecture.</b> The main radiological symptoms and syndromes of lung diseases..   | The main radiological symptoms and syndromes of lung diseases.  | LO 1 | 1   | Overview - illustrative, presentation   | Feedback   |
|          | <b>Practical lesson.</b> The main radiological symptoms and syndromes of lung   | The main radiological symptoms and syndromes of lung diseases. Syndrome of  | LO 1 | 3   | discussion, work with the provided pictures, work in  | oral questioning, description of pictures,   |



|          |   |  |      |     |  |  |
|----------|---|--|------|-----|--|--|
|          | diseases. Syndrome of extensive shading of the pulmonary field. Limited shading. Round shadow syndrome. Foci and limited focal dissemination. Syndrome of extensive focal dissemination. Extensive pulmonary field enlightenment syndrome | extensive shading of the pulmonary field. Limited shading. Round shadow syndrome. Foci and limited focal dissemination. Syndrome of extensive focal dissemination. Syndrome of extensive enlightenment of the pulmonary field. |      |     | pairs  | solving test tasks, solving crosswords   |
|          | <b>SIW (with teacher).</b> SIW. Some diagnostic aspects in X-ray detection of abscess and abscess pneumonia.  | Some diagnostic aspects in the X-ray detection of abscess and abscess pneumonia.   |      | 1/7 | preparation of presentations, drawing up crosswords, test tasks, situational tasks, work with an electronic X-ray - radiological atlas | protection of presentations, solving crosswords, test tasks, situational tasks, work with an electronic X-ray - radiological atlas |
| <b>3</b> | <b>Lecture.</b> Visual diagnostics of diseases and injuries of the lungs. Research methodology. X-ray semiotics of lung diseases. Visual diagnostics of tuberculosis and lung tumors.   | Visual diagnostics of diseases and injuries of the lungs. Research methodology. X-ray semiotics of lung diseases. Visual diagnostics of tuberculosis and lung tumors.  | LO 1 | 1   | Overview - illustrative, presentation Feedback   | Feedback   |



|          |  |  |      |     |   |   |
|----------|--|--|------|-----|---|---|
|          | <p><b>Practical lesson.</b><br/>Radiation diagnosis of coronavirus disease.<br/>Organization.<br/>Research methods, interpretation of results. Radiation manifestations of a new coronavirus infection. The use of CT of the lungs for COVID-19.</p>             | <p>Practical lesson.<br/>Radiation diagnosis of coronavirus disease.<br/>Organization. Research methods, interpretation of results. Radiation manifestations of a new coronavirus infection.<br/>The use of CT of the lungs for COVID-19.</p>    | LO1  | 3   | discussion, work with the provided images, work in small groups.  | oral questioning, description of pictures, solving test tasks, solving crosswords   |
|          | <p><b>SIW (with teacher). SIW.</b> Information content of radiation methods in the diagnosis of tumors and cysts of the mediastinum.</p>   | <p>Informativeness of radiation methods in the diagnosis of tumors and cysts of the mediastinum.</p>   | LO1  | 1/7 | preparation of presentations, drawing up crosswords, test tasks, situational tasks, work with an electronic X-ray - radiological atlas. | protection of presentations, solving crosswords, test tasks, situational tasks, work with an electronic X-ray - radiological atlas. |
| <b>4</b> | <p><b>Lecture.</b> Syndromes of urgent conditions of the chest organs with X-ray, CT, MRI, ultrasound diagnostic methods. The choice of an adequate research method for various injuries.<br/>Symptoms of damage with X-ray, CT, MRI, UD diagnostic methods.</p> | <p>Syndromes of urgent conditions of the chest organs with X-ray, CT, MRI, ultrasound diagnostic methods. The choice of an adequate research method for various injuries.<br/>Symptoms of damage with X-ray, CT, MRI, UD diagnostic methods.</p> | LO 2 | 1   | Overview - illustrative, presentation   | Feedback  |
|          | <p><b>Practical lesson</b><br/>Restricted enlightenment syndrome. Pulmonary pattern change syndrome. Syndrome of changes in the roots of the lungs.<br/>Limited enlightenment</p>  | <p>Limited enlightenment syndrome. Syndrome of changes in the pulmonary pattern.<br/>Syndrome of changes in the roots of the lungs.</p>  | LO 2 | 3   | discussion, work with the provided pictures, work in pairs  | oral questioning, description of pictures, solving test tasks, solving crossword  |



|          |  |  |              |     |  |   |
|----------|--|--|--------------|-----|--|---|
|          | syndrome. Syndrome of changes in the pulmonary pattern. Syndrome of changes in the roots of the lungs.   |  |              |     |  |   |
|          | <b>SIW (with teacher). SIW.</b> Radiation diagnostic methods for pathology of the chest cavity organs  | Radiation diagnostic methods for pathology of the chest cavity organs.   |              | 1/7 | preparation of presentations, drawing up crosswords, test tasks, situational tasks, work with an electronic X-ray - radiological atlas | protection of presentations, solving crosswords, test tasks, situational tasks, work with an electronic X-ray - radiological atlas. |
| <b>5</b> | <b>Lecture.</b> Basic principles of ultrasound examination of the heart and Dopplerography of blood vessels, angiography, coronary angiography. CT and MRI of the heart. | The main radiation syndromes of cancer of the lungs and pleura.  | LO 3<br>LO 4 | 1   | Overview - illustrative, presentation  | Feedback  |
|          | <b>Practical lesson.</b> Radiation diagnostics in therapeutic cardiology. X-ray and X-ray functional diagnostic methods for studying the heart and blood vessels.        | Radiation diagnostics in therapeutic cardiology. X-ray and X-ray functional diagnostic methods for studying the heart and blood vessels. | LO 2<br>LO 3 | 3   | discussion, work with the provided images, work in small groups.   | oral questioning, description of pictures, solving test tasks, solving crosswords   |
|          | <b>SIW.</b> Some diagnostic aspects in radiological detection of symptoms of damage to the heart   | Some diagnostic aspects in the X-ray detection of symptoms of heart and pericardial damage.  | LO 2<br>LO 3 | 1/7 | preparation of presentations, drawing up crosswords, test tasks, situational tasks, work with  | protection of presentations, solving crosswords, test tasks, situational  |



|   |  |   |              |     |   |   |
|---|--|---|--------------|-----|---|---|
|   | and pericardium.<br>Mid-term control   |   |              |     | electronic X-ray<br>- radiological<br>atlas<br>.                | tasks, work<br>with<br>electronic X-<br>ray -<br>radiological<br>atlas            |
| 6 | <b>Lecture.</b> Basic radiological syndromes of the cardiovascular system. Basic principles of ultrasound examination of the heart and Dopplerography of blood vessels, angiography, coronary angiography. CT and MRI of the heart | Basic principles of ultrasound examination of the heart and vascular Doppler ultrasonography, angiography, coronary angiography. CT and MRI of the heart.   | LO 2<br>LO 3 | 1   | Overview - illustrative, presentation                           | Feedback  |
|   | <b>Practical lesson.</b> Radiation diagnostics of congenital and acquired heart defects.   | Radiation diagnostics in therapeutic cardiology. X-ray and X-ray functional diagnostic methods for examining the heart and blood vessels. The main radiological syndromes of the cardiovascular system. Basic principles of ultrasound examination of the heart and vascular Doppler ultrasonography, angiography, coronary angiography. CT and MRI of the heart. Radiation diagnostics of congenital and acquired heart defects. | LO 3         | 3   | discussion, work with the provided images, work in small groups | oral questioning, description of pictures, solving test tasks, solving crosswords |
|   | <b>SIW (with teacher).</b><br><b>SIW. SIW.</b><br>Visual methods for   | Radiation anatomy of the esophagus and gastrointestinal tract   | LO 2<br>LO 3 | 1/7 | preparation of presentations, drawing up                        | . protection of presentations, solving  |



|   |   |   |              |     |   |  |
|---|---|---|--------------|-----|---|--|
|   | studying congenital and acquired heart defects.   | with X-ray, CT, MRI, research, research methods.  |              |     | crosswords, test tasks, situational tasks, work with an electronic X-ray - radiological atlas | crosswords, test tasks, situational tasks, work with electronic X-ray - radiological atlas |
| 7 | <b>Lecture.</b><br>Radiation diagnostics for diseases of the gastrointestinal tract. X-ray semiotics. The role of ultrasound, CT in the diagnosis of pathology of the liver, pancreas, gallbladder and bile ducts.  | . Imaging methods (MRI, CT, ultrasound, scintigraphy, arthroscopy, etc.) of the pathology of the bone and joint system, indications and rules, diagnostic value   | LO 2<br>LO 3 | 1   | Overview - illustrative, presentation   | Feedback   |
|   | <b>Practical lesson.</b><br>Radiation methods for diagnosing the digestive organs. Radiation diagnostics for diseases of the gastrointestinal tract. X-ray semiotics. Basic radiological syndromes of the digestive system. The role of ultrasound, CT in the diagnosis of pathology of the liver, pancreas, gallbladder and bile ducts. Differential diagnosis of pathology of the digestive organs. | Visual diagnostics of bone and joint pathology. Methods of visual diagnostics in rheumatology. X-ray examination of the joints and spine, indications and rules for this study, X-ray (often with the use of artificial contrast) P-signs of arthritis and arthrosis, osteomyelitis, P stage of arthritis. Imaging methods (MRI, CT, ultrasound, scintigraphy, arthroscopy, etc.) of the pathology of the bone and joint system, indications and rules, diagnostic value. | LO 2         | 3   | discussion, work with the provided images, work in small groups.                              | oral questioning, description of pictures, solving test tasks, solving crosswords          |
|   | <b>SIW (with teacher).</b><br><b>SIW.</b> Radiation anatomy of the esophagus and gastrointestinal tract with X-ray, CT, MRI,  | Normal radial anatomy of the liver, research methods. Syndromes of lesion in X-ray, CT, MRI, research.  | LO 2<br>LO 3 | 1/7 | preparation of presentations, drawing up crosswords, test tasks, situational tasks, work with | protection of presentations, solving crosswords, test tasks, situational                   |





|   |  |   |              |     |  |  |
|---|--|---|--------------|-----|--|--|
|   | studies, research methods.   |   |              |     | an electronic X-ray - radiological atlas.  | tasks, work with an electronic X-ray - radiological atlas.                           |
| 8 | <b>Lecture.</b><br>Imaging methods (MRI, CT, ultrasound, scintigraphy, arthroscopy, etc.) of pathology of the osteoarticular system, indications and rules, diagnostic value.  | Radiation diagnostics for diseases of the gastrointestinal tract. X-ray semiotics. The role of ultrasound, CT in the diagnosis of pathology of the liver, pancreas, gallbladder and bile ducts.   | LO 2         | 1   | Overview - illustrative, presentation  | Feddback   |
|   | <b>Practical lesson.</b><br>Visual diagnosis of osteoarticular pathology. Methods of visual diagnosis in rheumatology. X-ray examination of joints and spine, indications and rules for conducting this study, X-ray (often using artificial contrast). P-signs of arthritis and arthrosis, osteomyelitis, P stage of arthritis. Imaging methods (MRI, CT, ultrasound, scintigraphy, arthroscopy, etc.) of pathology of the osteoarticular system, indications and rules, diagnostic value.. | Radiation methods for diagnostics of the digestive system. Radiation diagnostics for diseases of the gastrointestinal tract. X-ray semiotics. The main radiological syndromes of the digestive system. The role of ultrasound, CT in the diagnosis of pathology of the liver, pancreas, gallbladder and bile ducts. Differential diagnosis of the digestive organs. | LO 3         | 3   | discussion, work with the provided images, work in small groups.   | oral questioning, description of pictures, solving test tasks, solving crosswords    |
|   | <b>SIW(with teacher). SIW</b><br>Basics of the radionuclide method and their application in practice   | Radiation diagnosis of damage to the esophagus and gastrointestinal tract.  | LO 2<br>LO 3 | 1/7 | preparation of presentations, drawing up crosswords, test tasks, situational tasks, work with electronic X-ray | protection of presentations, solving crosswords, test tasks, situational tasks, work |




|   |   |   |              |     |   |   |
|---|---|---|--------------|-----|---|---|
|   |   |   |              |     | - radiological atlas  | with electronic X-ray - radiological atlas  |
| 9 | <b>Lecture.</b><br>Visual diagnosis of endocrine system diseases: CT, MRI, radionuclide studies.  | The role of plain radiography, intravenous excretory urography, pyelography, angiography, ultrasound, CT, MRI, radionuclide renography.   | LO 2         | 1   | Overview - illustrative, presentation   | Feedback  |
|   | <b>Practical lesson.</b><br>Visual diagnosis of endocrine system diseases. Radiation methods for studying the thyroid and parathyroid glands  | Radiation diagnostic methods in nephrology and urology - the role of plain radiography, intravenous excretory urography, pyelography, angiography, ultrasound, CT, MRI, radionuclide renography. X-ray diagnostics of diseases of the urinary system. Ultrasound diagnostics of pathologies of the urinary system. Methods of radioisotope and radionuclide research in nephrology. | LO 3         | 3   | discussion, work with the provided images, work in small groups   | oral questioning, discussion of research results, solving situational problems  |
|   | <b>SIW (with teacher). SIW.</b><br>Visual diagnosis of the adrenal glands: computed tomography, MRI, scintigraphy of the adrenal cortex, scintigraphy of the medulla, adrenal glands, positron tomography. Methods of visualization of the hypothalamic-pituitary system: radiodiagnosis, scintigraphy with octreotide. | Visual diagnosis of the adrenal glands: computed tomography, MRI, scintigraphy of the adrenal cortex, scintigraphy of the medulla, adrenal glands, positron tomography. Methods of visualization of the hypothalamic-pituitary system: radiodiagnosis, scintigraphy with octreotide.  | LO 2<br>LO 3 | 2/6 | preparation of presentations, drawing up crosswords, test tasks, situational tasks, work with electronic X-ray - radiological atlas | protection of presentations, solving crosswords, test tasks, situational tasks, work with electronic X-ray - radiological atla. |



|           |  |   |              |     |  |   |
|-----------|--|---|--------------|-----|--|---|
| <b>10</b> | <b>Lecture.</b><br>Radiation diagnostics of diseases of the urinary and reproductive system  | Radiation diagnostics of diseases of the urinary and reproductive system  | LO 3<br>LO 4 | 1   | Overview - illustrative, presentation  | Feedback  |
|           | <b>Practical lesson.</b><br>Radiation diagnostic methods in nephrology and urology - the role of survey radiography, intravenous excretory urography, pyelography, angiography, ultrasound, CT, MRI, radionuclide renography. X-ray diagnosis of diseases of the urinary system. Ultrasound diagnosis of pathologies of the urinary system. Methods of radioisotope and radionuclide research in nephrology. | Radiation diagnostic methods in nephrology and urology - the role of survey radiography, intravenous excretory urography, pyelography, angiography, ultrasound, CT, MRI, radionuclide renography. X-ray diagnosis of diseases of the urinary system. Ultrasound diagnosis of pathologies of the urinary system. Methods of radioisotope and radionuclide research in nephrology.. | LO 2         | 3   | discussion, work with the provided images, work in small groups.   | oral questioning, description of pictures, solving test tasks, solving crosswords   |
|           | <b>SIW (with teacher).</b><br><b>SIW.</b> Radiation diagnostics in urology and gynecology<br><br><b>Border control</b>   | Radiation diagnostics in urology and gynecology   |              | 2/6 | preparation of presentations, drawing up crosswords, test tasks, situational tasks, work with an electronic X-ray - radiological atlas | . protection of presentations, solving crosswords, test tasks, situational tasks, work with electronic X-ray - radiological atlas |
| <b>9.</b> | <b>Teaching and Teaching Methods</b>   |   |              |     |  |   |
| 9.1       | Lecture  | Overview – illustrative   |              |     |  |   |
| 9.2       | Practical lesson   | Discussion, work with the provided images, work in small groups. Oral questioning, discussion of research results, solving situational problems   |              |     |  |   |
| 9.3       | SRO.SROP   | Shares opinions, discuss and evaluate   |              |     |  |   |



|   |  |   |  |  |
|---|--|---|--|--|
| 9.4   | Mid-term control   | Testing, situational problem solving and oral questioning |  |  |
| <b>10.</b>  | <b>Evaluation criteria</b>   |   |  |  |
| Alphabetic grade  | The digital equivalent of points   | Percentage  | Assessment according to the traditional system |  |
| A   | 4,0  | 95-100  | GOOD   |  |
| A -   | 3,67   | 90-94   |  |  |
| B +   | 3,33   | 85-89   | FINE   |  |
| B   | 3,0  | 80-84   |  |  |
| B -   | 2,67   | 75-79   |  |  |
| C +   | 2,33   | 70-74   | Satisfactorily                                 |  |
| C   | 2,0  | 65-69   |  |  |
| C -   | 1,67   | 60-64   |  |  |
| D+  | 1,33   | 55-59   |  |  |
| D-  | 1,0  | 50-54   | Unsatisfactory                                 |  |
| FX  | 0,5  | 25-49   |  |  |
| F   | 0  | 0-24  |  |  |
| <b>11.</b>  | <b>Learning Resources</b>  |   |  |  |
| Electronic resources, including, but not limited to: databases, animation simulators, professional blogs, websites, other electronic reference materials (for example: video, audio, digests) | <ul style="list-style-type: none"> <li>lib.ukma.kz</li> <li>Электронная библиотека ЮКМА - <a href="https://e-lib.skma.edu.kz/genres">https://e-lib.skma.edu.kz/genres</a></li> <li>Республиканская межвузовская электронная библиотека (РМЭБ) – <a href="http://rmebrk.kz/">http://rmebrk.kz/</a></li> <li>Цифровая библиотека «Акнурпресс» - <a href="https://www.aknurpress.kz/">https://www.aknurpress.kz/</a></li> <li>Электронная библиотека «Эпиграф» - <a href="http://www.elib.kz/">http://www.elib.kz/</a></li> <li>Эпиграф - портал мультимедийных учебников <a href="https://mbook.kz/ru/index/">https://mbook.kz/ru/index/</a></li> <li>ЭБС IPR SMART <a href="https://www.iprbookshop.ru/auth">https://www.iprbookshop.ru/auth</a></li> <li>информационно-правовая система «Зан» - <a href="https://zan.kz/ru">https://zan.kz/ru</a></li> <li>Cochrane Library - <a href="https://www.cochranelibrary.com/https://www.youtube.com/channel/UC2KQ2vGectAWstvVXKUL2Og">https://www.cochranelibrary.com/https://www.youtube.com/channel/UC2KQ2vGectAWstvVXKUL2Og</a></li> </ul> |   |  |  |
| Electronic textbooks  | <p>Diagnostic Radiology Physics D.R. Dance, S. Christofides/<br/>                     Xray Film Reading Made Easy William F Hook<br/>                     Introduction to Radiology (Article) Dr S P Tyagi<br/>                     Effective Physics Knowledge for Diagnostic Radiologists (Article) Perry Sprawls<br/>                     Radiological Anatomy Amr Attia Hewety, Abd Elhai said Abd Elhi<br/>                     The Role of Diagnostic and Therapeutic Radiology in the Field of Public Health (Article)Cari Borrás<br/>                     Early History of X Rays Alexi Assmus<br/>                     Introduction to Medical Imaging (Presentation) Jeff Benseler<br/>                     Introduction to Interventional Radiology (Presentation)TheaMoran<br/>                     The Role of Interventional Radiology in the Diagnosis and Treatment of Solid Tumors (Presentation)<br/>                     Victoria L Anderson,Dr Levy,Dr Chang</p>   |   |  |  |

|   |   |  |
|---|---|--|
| ОҢТҮСТІК-ҚАЗАҚСТАН<br><b>MEDISINA</b><br><b>AKADEMIASY</b><br>«Оңтүстік Қазақстан медицина академиясы» АҚ | <br><b>SKMA</b><br>-1979- | SOUTH KAZAKHSTAN<br><b>MEDICAL</b><br><b>ACADEMY</b><br>АО «Южно-Казахстанская медицинская академия» |
| Department of Phtiziopulmonology and radiology  |   | 044-70/16  |
| Syllabus: «Visual diagnostic»   |   | стр. из 24   |

|   |  |
|---|--|
| Laboratory physical resources   |  |
| Special programs  |  |
| Magazines (electronic magazines)  |  |
| Literature  | <p><b>main:</b> Medical radiology - Lindenbraten L.D, Koroluk I.P year of release 2000. Radiation therapy – Trufanov G.E, year of release 2010. Getting Started in Clinical Radiology – George W. Eastman. Christoph Wald. Jane Crossin</p> <p><b>additional:</b> sites – 24radiology.ru, Learning Radiology, Geeky Medics Radiology Tutorials, Radiology Cafe. Radiopaedia.org.</p> |
| <b>12. Discipline policy</b>  |  |
| <b>Requirements you make to students</b>  | Penalty and incentive measures   |
| It is not allowed to skip classes without a valid reason.                       | If a practical lesson is missed without a good reason, an NB is given, if a lecture is missed without a good reason, the assessment of the midterm control is reduced - 1 point for each missed lecture.   |
| Timely work off missed classes for a good reason.                               | Working off a missed lesson for a good reason is carried out only with the permission of the dean's office (work sheet).   |
| Attendance at classes and lectures on time.                                     | If the student is late for more than 5 minutes, he will not be admitted to the lesson. Nb is exhibited in the educational journal and lecture journal.   |
| The student must have an appropriate outfit (robe, cap, changeable shoes, etc.) | If the form is inappropriate, the student is not allowed to the lesson or lecture, in the educational journal or lecture journal is exhibited by the NB  |
| The student has a medical sanitary book   | Without a health book, a student is not allowed into the clinic's departments, the nb is displayed in the educational journal  |
| Srop  | If you miss the SRO without a valid reason, the mark for the SRO decreases - 2 points for each missed lesson   |
| Timely fulfillment of tasks for SRO.  | The assessment of the SRO is set in the SRO classes according to the schedule in the educational journal of progress and the electronic journal, taking into account the penalty points, are subtracted from the assessments of the SRO.   |
| The student must treat teachers and fellow students with respect                | . In case of disrespectful student behavior, the student's behavior is discussed at the cathedral meeting, this is reported to the dean's office and parents   |
| Careful attitude of students to the property of the department                  | When the property of the department is destroyed, the student restores the property on his own.  |
| Mid-term control  | The midterm control of students' knowledge is carried out at least twice during one academic period on 8/15 weeks of theoretical   |



training with putting down the results of midterm controls in the academic journal of progress and electronic journal, taking into account penalty points for missing lectures (missed lectures in the form of penalty points are deducted from the assessments midterm control). a student who does not show up for midterm control without a valid reason is not allowed to take the discipline exam. A student who does not appear for midterm control for a good reason, immediately after starting classes, submits an application to the dean, provides supporting documents (due to illness, family circumstances or other objective reasons), receives a work sheet, which is valid for the term specified in clause 12.4. The results of midterm control are provided to the dean's office in the form of a report by the end of the control week.

Assessment of the final control

A student who does not score a passing score (50%) in one of the types of control (current control, midterm control No. 1 and / or No. 2) is not allowed to take the exam in the discipline.

**13. Academic policy based on the moral and ethical values of the academy**

Academic policy. Clause 4 Code of honor of the student

The student of the Academy is a patriot of the Republic of Kazakhstan, highly respects the flag, coat of arms, anthem, the state language - the main attributes of sovereign Kazakhstan. The student treats with care and preserves the glorious traditions, moral values of the previous generation of the Academy.

The student is disciplined, polite, sociable, observes generally accepted moral and ethical norms of behavior in public places and in everyday life, is self-critical and demanding of himself and his actions.

The student condemns and actively promotes rejection and opposition to any manifestations of corruption, corrupt worldview and behavior in the Academy among students and teachers

Discipline Grading Policy

Current control: testing, assessment of solving situational problems, discussion assessment sheet, assessment sheet of work in small groups, round table assessment sheet, diagnostic algorithm and treatment regimens

Midterm control: Testing. Controlling the assimilation of practical skills.

Mid-term control of students' knowledge is carried out at least twice during one academic period on 7/12 days of theoretical training with the completion of midterm examinations in the educational progress journal and electronic journal, taking into account penalty points for missing lectures (lectures are skipped in the form of penalty points from the assessments of the intermediate control).

- the penalty point for missing one lecture without a valid reason is 1.0 point;

- a student who does not show up for midterm control without a valid reason is not allowed to take the discipline exam. A student who does not appear for midterm control for a good reason, immediately after starting classes, submits an application to the dean, provides supporting documents (due to illness, family circumstances or other objective reasons), receives a work sheet, which is valid for the term specified in clause 12.4. The results of midterm control are provided to the dean's office in the form of a report by the end of the control week.

- The assessment of the SRO is set in the classroom of the SRO according to the schedule in the educational journal of progress and the electronic journal, taking into account the penalty points, are subtracted from the assessments of the SRO).



Department of Phtiziopulmonology and radiology

Syllabus: «Visual diagnostic»

044-70/16

стр. из 24

- if you miss one lesson of the SSSP - a penalty point of 2.0;
  - A student who does not score a passing score (50%) in one of the types of control (current control, midterm control No. 1 and / or No. 2) is not allowed to take the exam in the discipline.
  - The examination score is set based on the results of the current and midterm controls - the assessment of the admission rating (ORD) (60%) and the final control - the marks on the exam (40%).
  - ORD (assessment of the rating of admission) is determined as the average value of points for practical training, SRO, and midterm control.
  - A student who scored a minimum score of the ORD equal to 1 (15%) and above is allowed to take the exam.
- Final control: exam including OSKE and testing.

14.

**Approval, approval and revision**

|   |                                      |   |  |
|---|--------------------------------------|---|--|
| Date of agreement with the Library and Information Center | Protocol No. <u>9</u><br>14.06.24    | Head of BIC<br>Darbicheva R.I.          |  |
| Date of approval by the department                        | Protocol No. <u>14</u><br>13.06.2024 | Head of the department<br>Kasaeva L.T.. |  |
| Date of approval for AK OP                                | Protocol No. <u>11</u><br>14.06.24   | Chairman of the CPC<br>Kalmenov N.Zh.   |  |