

Catalog of elective disciplines

1. **Department:** «Surgery, Oncology and Traumatology»
2. **Level of preparation:** Residency
3. **Educational program:** «Adult oncology».
4. **Course:** 2
5. **Name of the elective discipline:** «Innovative technologies in Oncology».
6. **Number of credits:** 4 credits / 120 hours.
7. **Goal:** to acquire special knowledge necessary for the development of skills and abilities of innovative methods of diagnosis and treatment of oncopathology, the formation of modern diagnostic and therapeutic competencies.
8. **Tasks:**
 - Improvement of knowledge on innovative methods of diagnosis and treatment of oncopathology
 - Expanding knowledge and skills in the interpretation of modern laboratory, invasive and non-invasive methods of examination, conducting differential diagnostics of patients with cancer;
 - Study of modern innovative methods of diagnosis and treatment of cancer patients
9. **Content of disciplines:** Fundamentals of modern innovative technologies in the diagnosis and treatment of malignant neoplasms; primary, secondary, and tertiary cancer prevention; management of cancer services; use of information technologies.
10. **Justification of the choice of discipline:** In the conditions of dynamic development and development of new technologies for diagnosis and treatment of oncopathology, it is necessary to improve the knowledge and professional skills of a rmination of elements of specific competencies that contribute to a significant improvement as a professional activity and the improvement of quality of rendering of medical care in the treatment of cancer

11. Learning outcomes (competencies).

№	Knowledge (cognitive sphere)	skills (psychomotor sphere)	Personal and professional competencies (relationships)
1	<ul style="list-style-type: none"> • Knows modern methods of diagnosis and dif. diagnostics of cancer • Knows innovative 	<ul style="list-style-type: none"> • Able to assess the patient's condition according to who recommendations. • Can scientifically analyze socio-biological, medical-social and 	<ul style="list-style-type: none"> • Based on the identified data of anamnesis, examination, laboratory and instrumental examination of the patient, makes

methods of conservative and the latest methods of surgical treatment of cancer.	epidemiological conditions and factors of oncopathology. <ul style="list-style-type: none"> • Possesses modern methods and techniques of surgical treatment • * Is able to establish contact with the patient /relatives for an effective treatment process, involve the patient in the process of diagnosis and treatment. 	recommendations according to the who, according to the clinical protocols of MOH. <ul style="list-style-type: none"> • Based on the principles of evidence-based medicine, builds a strategy and tactics for managing patients with oncopathology.
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12. Prerequisites: internship in the specialty "Surgery, GP".

13. Post requisites: doctoral studies.

14. Literature:

Primary:

1. Davydov M. I. учебник "Oncology". The transition to the Kazakh language A. K. Koishybayev. - M. GEOTAR-Medicine 2018
2. Abisatov H. A. General aspects of Clinical Oncology. 1 Ch. Уч. "I don't know," he said.- Almaty Evero 2016
3. Abisatov H. A. General aspects of Clinical Oncology. 2 Ch. Уч. "I don't know," he said.- Almaty Evero 2016
4. Sadykov S. S. Clinical Oncology: textbook in Kazakh Radiation therapy: S. S. Sadykov, zh. zh. Zholdybay, "I Don't Know," She Said. - Almaty: Evero, 2020 – - 296 P.
5. radiation therapy (radiotherapy) [text]: textbook / Ed.Prof.G. E. Trufanov; Kaz.language.AUD.and responsible Ed.Prof."No," He Said. - 3-head.Edd.full. - M. : GEOTAR-media, 2020. - 224 p.p.

Additional:

1. Oncology. National leadership. A short edition. The manual/ edited by V.I. Chissov.- M GEOTAR Media. 2016
2. Abisatov H.A. Lectures on oncogynecology and oncurology. 1 vol. Lectures on oncogynecology: lectures by H.A. Abisatov, A.A. Baynazarova, A.M. Baiduvaliev – Almaty: Evero 2016
3. Abisatov H.A. Lectures on oncogynecology and oncurology. 2 vol. Lectures on oncogynecology: lectures by H.A. Abisatov, A.A. Baynazarova, A.M. Baiduvaliev – Almaty: Evero 2016
4. Mammology: A national guide / editor–in–chief V.P. Kharchenko, N.I. Rozhkova. - M. GEOTAR - Media 2011
5. Gantsev H. S. Oncology: Textbook- M MIA, 2011-488s.

1. Department: «Surgery, Oncology and Traumatology»

2. Level of preparation: Residency

3. Educational program: «Adult oncology».

4. Course: 2

5. Name of the elective discipline: «Interventional oncoradiology (chemotherapy)».

6. Number of credits: 4 credits / 120 hours.

7. Goal: to Develop knowledge, skills, and skills to provide interventional care (radiation and chemotherapy) in oncopathology.

8. Tasks:

- increasing knowledge of interventional technologies in the diagnosis and treatment of cancer;
- increasing knowledge of modern methods of diagnosis and differential diagnosis of critical conditions in Oncology
- deepening of knowledge, skills and skills in preoperative preparation of cancer patients, assessment of the initial state of the patient, determination of the risk of interventional therapy, anesthesia and tactics of intensive care in the postoperative period.

9. Content of disciplines: The discipline of radiology, which studies the methods of treating various oncological diseases by using percutaneous approaches, catheters and other low-traumatic instruments, without anesthesia, under the control of radiation imaging methods using vascular and non-vascular interventional interventions.

10. Justification of the choice of discipline: The frequency of oncological diseases requiring interventional interventions, in terms of diagnosis and treatment, does not tend to decrease. Complications in the result of the diagnostical and tactical errors are often fatal. In this regard, it is very important to improve practical skills in providing emergency cancer care and management tactics for patients with urgent conditions.

11. Learning outcomes (competencies)

№	Knowledge (cognitive sphere)	skills (psychomotor sphere)	Personal and professional competencies (relationships)
1	<ul style="list-style-type: none"> • Knows the methods of diagnosis and treatment of cancer . • Has the terminology of oncological and surgical diseases, knowledge of modern scientific achievements of 	<ul style="list-style-type: none"> • Able to assess the patient's condition according to who recommendations. • Can scientifically analyze socio-biological, medico-social and epidemiological conditions and factors of oncological pathologies. 	<ul style="list-style-type: none"> • Demonstrates knowledge of the basics of healthcare legislation and regulatory legal acts regulating the activities of health authorities and individual medical organizations in the Republic of Kazakhstan; • Based on the revealed data: anamnesis,
	medicine in the field of Oncology. <ul style="list-style-type: none"> • Knows the methods of involving the patient in the process of diagnosis and treatment, the basics of professional attitude to the patient, professional relations with colleagues and medical staff. 	<ul style="list-style-type: none"> • Is able to establish contact with the patient /relatives for an effective treatment process, involve the patient in the process of diagnosis and treatment. 	examination, laboratory-instrumental methods of examination, the patient's condition, makes recommendations according to who, according to the protocols of the Ministry of health of the Republic of Kazakhstan. <ul style="list-style-type: none"> • Based on the principles of evidence-based medicine, builds a strategy and tactics for managing patients suffering from cancer.

12. **Prerequisites: internship in the specialty "Surgery, GP".**

13. **Post requisites: doctoral studies.**

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2. **Level of preparation:** Residency.

3. **Educational program:** «Adult oncology».

4. **Course:** 2

5. **Name of the elective discipline:** «Basics of oncurology».

6. **Number of credits:** 4 credits / 120 hours.

7. **Goal:** to improve knowledge and clinical skills in providing specialized care in oncurology.

8. **Tasks:**

- In-depth knowledge of urology and oncurology;
- Improvement of knowledge on modern principles of diagnostics and differential diagnostics in patients with renal and urinary tract oncopathology;
- Independent implementation of qualified medical care for various conditions and diseases in oncurology that require surgical intervention.

9. **Content of disciplines:** Covers the main methods of diagnosis and treatment of malignant formations of the genitourinary system, the principles and stages of surgical, chemotherapeutic or radiation treatment of diseases of the urooncological profile, methods of diagnosis, prevention and treatment of complications. Know the basic principles of palliative care for patients with malignant neoplasms of the genitourinary system.

10. **Substantiation of the choice of discipline:** The problem of diagnosis and surgical treatment of cancer of the kidneys and urinary tract continues to be relevant due to the high level of morbidity, the complexity of early diagnosis of pathology, the frequency of metastasis and limited opportunities for radical surgical treatment. Improvement of methods of diagnostics and surgical

treatment is aimed at reducing the hospital stay of patients due to the healing time and early rehabilitation.

11. Learning outcomes (competencies)

№	Knowledge (cognitive sphere)	skills (psychomotor sphere)	Personal and professional competencies (relationships)
	<ul style="list-style-type: none"> • Demonstrates knowledge of the subject and tasks of the discipline • Knows the principles of 	<ul style="list-style-type: none"> • Able to assess the patient's condition according to who recommendations. • Can scientifically analyze socio-biological, 	<ul style="list-style-type: none"> • Able to interpret the data of laboratory and instrumental methods of examination (clinical and biochemical analyses, ultrasound, ECG, R-images, MRI, etc.) current and in dynamics. • Able to conduct clinical observations in

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