

## Catalog of elective disciplines

1. **Department:** Family Medicine

2. **Level of training** - residency

3. **Of educational programs:** 7R01138 Family Medicine

4. **Course I**, number of credits – 2, number of hours - 60

5. **The name of the elective discipline:** Dietetics

6. **Goal:** training of a family doctor with the skills necessary for effective counseling of patients and their families on the organization of rational nutrition, taking into account the norms of physiological needs, the biological properties of food in diet therapy of diseases at the PHC level.

7. **The content of the discipline:** Modern methods for assessing the nutritional status of patients. Alimentary-dependent diseases and conditions. Nutritional and metabolic correction of nutritional status in cardiovascular diseases. Alimentary factor in the prevention and treatment of diseases of the digestive system and blood system. Features of nutrition of children and pregnant women. Pathogenetic foundations of diet therapy for allergies and diseases of the osteoarticular, urinary systems. Nutritional therapy for endocrine disorders.

### 8. Tasks:

- to teach skills to determine the characteristics of the initial clinical, nutritional, metabolic, mineral, hormonal, enzyme and psychological status in patients;
- to form the skills of effective counseling on differentiated correction by nutritive and metabolic means for various pathologies (diseases of the respiratory system, cardiovascular system, digestion, kidneys, urinary tract, etc.);
- to teach the skills of filling out accounting and reporting documentation within the framework of the organization and implementation of therapeutic nutrition and the development of individual menus, taking into account the norms of physiological needs, biological properties of food products in diet therapy of diseases.
- to develop skills for teaching patients and their relatives the basic rules of rational nutrition and diet therapy when carrying out health-improving, preventive, medical-diagnostic and rehabilitation measures in an outpatient clinic and at home

9. **Justification for the choice of discipline:** At present, there is no doubt about the exceptional role of nutrition in the preservation and regulation of the most important national resource - the health of citizens, which is directly related to the industrial and economic potential of the country. The rate of negative dynamics of alimentary-dependent pathology is formed mainly in childhood and in the working-age population. At the same time, negative tendencies are deliberately preventable.

Adequate therapeutic and prophylactic nutrition, as a direction of practical restorative medicine, being an important stage of therapeutic and prophylactic measures, allows, on the one hand, to purposefully restore functional reserves and adaptive abilities of the body, impaired as a result of the disease, on the other hand, to carry out individual differentiated anti-relapse treatment in patients with chronic diseases, prevention of their complications and improves their quality of life. The subject is intended for resident physicians on basic nutritional issues.

10. **Learning outcomes:**

LO1 able to formulate a clinical diagnosis, prescribe a plan for treatment and prevention interventions and evaluate their effectiveness across the entire spectrum of diseases, taking into account the age, gender and problems of the patient based on evidence-based practice

LO2 able to effectively interact with the patient, members of his family and the community in which he lives, with other professionals working in the primary level (social workers, psychologists and other employees in PHC institutions) in order to achieve the best results for the patient

LO3 able to assess risks and use the most effective methods to ensure a high level of safety and quality of medical care during diagnostic and therapeutic interventions.

LO4\_able to act within the legal and organizational framework of health system of the Republic of Kazakhstan when carrying out diagnostic, therapeutic and preventive interventions in primary health care, provide basic assistance in emergency situations, work as part of interprofessional teams to implement the nation's health promotion policy

LO5 able to formulate adequate research questions, critically evaluate special literature in the field of family medicine, effectively use international databases in their daily activities, participate in the work of the research team.

LO6\_able to study independently and train other members of the professional team, to actively participate in discussions, conferences and other forms of continuous professional development in the field of family medicine.

**11. Prerequisites:** ORP in internship

**12. Postrekvizity** cycles of major disciplines in the 2nd academic year of residency

**13. Literature:**

1. Нутрициология [Мәтін] : оқулық / Л. З. Тель [ж. б.]. - М. : "Литтерра", 2015. - 512 бет. +эл. опт. диск (CD-ROM)
2. Основы правильного питания/Бейсенбаев А.Ю., Бейсенбаева З.А., Уразбаева К.А. , 2016//<https://aknurpress.kz/login>
3. Роль общественного здравоохранения в организации рационального питания населения/Тургамбаева А.К. , 2019//<https://aknurpress.kz/login>
4. Дұрыс тамақтану негіздері/Бейсенбаев А.Ю., Жандарбекова Д.Д., Кожабекова Г.А. , 2016//<https://aknurpress.kz/login>
5. Профилактика микронутриентной недостаточности и организация здорового питания как приоритет здравоохранения РК в системе охраны здоровья матери и ребенка [Текст] / Ю. М. Мусаев, Н. В. Югай [и др.] // Вестник ЮКМА = ОҚМА хабаршысы. - 2019. - №1(85). - С. 70-72. <https://lib.ukma.kz/>
6. Абдуллабекова, Р. М. Питание и состояние здоровья человека [Текст] / Р. М. Абдуллабекова, Ш. С. Бегалиев, Ш. С. Бегалиев, М. М. Сапакбай // ОҚМФА хабаршысы = Вестник ЮКГФА. - 2014. - Т.3, №3. - С. 18-20. <https://lib.ukma.kz/>
7. Омаров, Руслан/Основы рационального питания [Электронный ресурс] : учеб. пособие / Р. С. Омаров, О. В. Сычева; М-во сельского хоз. РФ, СтГАУ. - Ставрополь : АГРУС, 2014. - 77 с. . <http://elib.kaznu.kz/>.
8. Педиатрияда тағаммен емдеу. – Жалпы редакциясын
9. басқарған академик Т.Ш.Шарманов, Алматы: «Эверо» - 2020- 386 б. [https://elib.kz/ru/search/read\\_book/](https://elib.kz/ru/search/read_book/)
10. Лечебное питание в педиатрии: Учебно-методическое пособие
11. для студентов/ Т.К. Бекбосынов, М.А. Ахметов, Г.Х. Хасенова,
12. – Алматы: Эверо, 2020. – 472 ст. [https://elib.kz/ru/search/read\\_book/](https://elib.kz/ru/search/read_book/).
1. **Additional** Королев, А. А. Гигиена питания. Руководство для врачей [Текст] : руководство / А. А. Королев. - М. : ГЭОТАР - Медиа, 2016. - 624 с. : ил  
Терехин, С. П. Қазіргі таңда нутрициологияның өзекті сұрақтары кесте және схема түрінде [Мәтін] : оқу-әдістемелік құралы / С. П. Терехин. - ; ҚММУ Ғыл. кеңесі. -Алматы : Эверо, 2014. - 342 бет.

1. **Department:** Family Medicine
2. **Level of training** - residency
3. **Of educational programs:** 7R01138 Family Medicine
4. **Course I**, number of credits – 2, number of hours - 60
5. **The name of the elective discipline** Radiation diagnostics in the practice of a family doctor
6. **Goal:** training of a family doctor with theoretical and practical skills and knowledge about the possibilities of methods of radiation diagnostics and treatment of diseases of organs and systems using physical influences (electromagnetic and corpuscular radiation and ultrasound).
7. **The content of the discipline:** Legal foundations of medical practice. The history of radiation diagnostics. Fundamentals of X-ray Research. Organization of a radiation diagnostics service. Physicotechnical fundamentals of radiology and other methods of radiation diagnostics. Radiation safety in X-ray examinations. Radiation diagnostics of diseases of the head and neck. Radiation diagnosis of diseases of the musculoskeletal system. Radiation diagnostics of diseases of internal organs. Radiation diagnostics in pediatrics.

**8.Tasks:**

- to form the residents' skills and abilities to conduct radiation diagnostics in accordance with the requirements of regulatory documents governing the rules and principles of conducting radiation diagnostics.
- study of the physical foundations of ionizing and non-ionizing studies used in medicine for diagnostic purposes;
- studying the principles of forming images of internal organs using various types of radiation;
- formation of the foundations of clinical thinking based on the analysis of ray images for the future practice of a doctor;
- the formation of professional skills in examining a patient using radiation research methods to identify symptoms and syndromes of major diseases of organs and systems.

**9. Justification for the choice of discipline:** This discipline, as well as the Standard, is part of the quality assurance system and establishes the rules for conducting radiation diagnostics with the participation of a person as a subject, as well as documenting and presenting the results of radiation diagnostics. The principles set out in this Standard also apply to radiation research that has an impact on the safety and well-being of the person acting as the research subject.

The subject is intended for resident doctors on the main issues of radiation diagnostics in the practice of a family doctor

## 10. Learning outcomes:

LO1 able to formulate a clinical diagnosis, prescribe a plan for treatment and prevention interventions and evaluate their effectiveness across the entire spectrum of diseases, taking into account the age, gender and problems of the patient based on evidence-based practice

LO2 able to effectively interact with the patient, members of his family and the community in which he lives, with other professionals working in the primary level (social workers, psychologists and other employees in PHC institutions) in order to achieve the best results for the patient

LO3 able to assess risks and use the most effective methods to ensure a high level of safety and quality of medical care during diagnostic and therapeutic interventions.

LO4 able to act within the legal and organizational framework of health system of the Republic of Kazakhstan when carrying out diagnostic, therapeutic and preventive interventions in primary health care, provide basic assistance in emergency situations, work as part of interprofessional teams to implement the nation's health promotion policy

LO5 able to formulate adequate research questions, critically evaluate special literature in the field of family medicine, effectively use international databases in their daily activities, participate in the work of the research team.

LO6 able to study independently and train other members of the professional team, to actively participate in discussions, conferences and other forms of continuous professional development in the field of family medicine.

**11. Prerequisites:** ORP in internship

**12. Postrekvizity** cycles of major disciplines in the 2nd academic year of residency

**13.Literature:**

**the main**

1. Хамзин Ә. Сәулелік диагностика. 1 кітап : монография / Ә. Хамзин. - Алматы : New book, 2022. - 152 бет. Хамзин Ә. Сәулелік диагностика. 2 кітап : монография / Ә. Хамзин. - Алматы : New book, 2022. - 152 бет.
2. Рентгенологическая диагностика туберкулеза органов дыхания у детей и подростков : учебное пособие / Р. А. Агзамова [и др.]. - Алматы : New book, 2022. - 112 с
3. Хамзабаев Ж. Х. Диагностическая и интервенционная радиология при вазоренальной гипертензии (От простой рентгенографии до интервенционной радиологии) : монография / Ж. Х. Хамзабаев. - Алматы : Эверо, 2015. - 316 с
4. Садықов С. С. Клиникалық радиология : оқулық / С. С. Садықов, Ж. Әбдірахманов, Ә. Ж. Әбдірахманова. - Алматы : New book, 2022. - 572 бет.

**Additional**

- 1.Общая врачебная практика. В 2 т. Т. 1 [Текст] : национальное рук. / под ред. И. Н. Денисова, О. М. Лесняк . - ; Ред. под эгидой АСМОК. - М. : ГЭОТАР - Медиа, 2013. - 976 с
- 2.Жалпы дәрігерлік практика: ұлттық нұсқаулық. 2 томдық. 1 том [Мәтін] : нұсқаулық / Қазақ тіліне ауд. Қ. Ә. Әлиханова. - М. : ГЭОТАР - Медиа, 2016. - 992 б. с. : ил.
- 3.Хамзабаев, Ж. Х. Диагностическая и интервенционная радиология при вазоренальной гипертензии (От простой рентгенографии до интервенционной радиологии) [Текст] : монография / Ж. Х. Хамзабаев. - Алматы : Эверо, 2015. - 316 с

## Electronic publications

1. Жалпы дәрігерлік практика. Ұлттық нұсқаулық, 2 т. Т1. [Электронный ресурс] : оқулық / ред. И. Н. Денисов ; қаз. тіліне ауд. Қ. Ә. Әлиханова. - Электрон. текстовые дан. ( 110Мб). - М. : ГЭОТАР - Медиа, 2016. - 992 бет. эл. опт. диск (CD-ROM).
2. Лучевая диагностика. Т.1 [Электронный ресурс] : учебник / под ред. Г. Е. Труфанова. - Электрон. текстовые дан. ( 81,6 Мб). - М. : Изд. группа "ГЭОТАР-Медиа", 2011. - 416 с. эл. опт. диск (CD-ROM) : ил. - (Электронный учебник).
3. Сәулелі диагностика [Электронный ресурс] : оқулық / қазақ тіл. ауд. А. Б Ахметбаева ; ред. басқ. Г. Е. Труфанов. - Электрон. текстовые дан. (421Мб). - М. : ГЭОТАР - Медиа, 2014. - 576б. с.
4. Лучевая диагностика заболеваний органов дыхания и средостения [Электронный ресурс] : учебное пособие / Е. Б. Бекмуратов [и др.] ; М-во здравоохранения и социального развития РК. ЮКГФА. - Электрон. текстовые дан. - Шымкент : [б. и.], 2016. - эл. опт. диск
5. Труфанов, Г. Е. Лучевая терапия. Т. 2 [Электронный ресурс] : учебник / Г. Е. Труфанов, М. А. Асатурян, Г. М. Жаринов. - Электрон. текстовые дан. ( 41,7 Мб). - М. : Издательская группа "ГЭОТАР- Медиа", 2010. - 192 с. эл. опт. диск (CD-ROM). - (Электронный учебник
6. Атлас лучевой анатомии человека [Электронный ресурс] : атлас / В. И. Филимонов [и др.]. - Электрон. текстовые дан. ( 54,1 Мб). - М. : ГЭОТАР - Медиа, 2010. - 452 эл. опт. диск (CD-ROM) : ил. - (Электронный учебник)
7. Лучевая диагностика и дозиметрия : Учебно-методический комплекс. / Сост. К.М. Турдыбеков. - Караганда: Изд-во КарГУ, 2010. - 80 с.
8. Патоморфология и лучевая диагностика некоторых заболеваний легких/Серикбай М.Қ. , 2020/<https://aknurpress.kz/>
9. Лучевая диагностика и терапия в акушерстве и гинекологии. Национальное руководство. Адамян Л.В., Демидов В.Н., Гус А.И., Терновой С.К. Год издания: 2012 Размер: 43.99 МБ/<https://kingmed.info/>
10. Лучевая диагностика заболеваний костей и суставов Бургенер Ф.А., Кормано М., Пудас. Т. Год издания: 2011 Размер: 24.6 МБ/<https://kingmed.info/>
11. Лучевая диагностика болезней сердца и сосудов. Национальное руководство. Коков Л.С. Год издания: 2011 Размер: 47.23 МБ/<https://kingmed.info/>
12. Лучевая диагностика в травматологии и ортопедии МакКиннис Линн Н. Год издания: 2015 Размер: 114.04 МБ/<https://kingmed.info/>
13. Основы лучевой диагностики и терапии. Национальное руководство Терновой С.К. Год издания: 2012 Размер: 68.22 МБ/<https://kingmed.info/>

1. **Department:** Family Medicine

2. **Level of training** - residency

3. **Of educational programs:** 7R01138 Family Medicine

4. **Course I**, number of credits – 2, number of hours - 60

5. **The name of the elective discipline** Good clinical practice

6. **Goal:** training of a family physician with the skills necessary to participate effectively in clinical trials conducted in accordance with the ethical principles laid down in the 1964 Declaration of Helsinki by the World Medical Association and reflected in the Standard and Regulatory Requirements.

**7. The content of the discipline:** Standard and principles of good clinical practice. Study rationale and design. The rights, safety and well-being of research subjects. Informed consent of research subjects. Researcher's qualifications and obligations. Clinical trial protocol. List of the main documents of the clinical trial. Procedure for providing safety information during clinical trials. The structure and content of the clinical trial report.

**8.Tasks:**

- to teach to form students' skills and abilities to conduct scientific research in accordance with the requirements of regulatory documents governing the rules and principles of scientific research.
- develop skills in determining the rights, safety and well-being of research subjects;
- train in the skills of analyzing information (preclinical and clinical) about the investigational drug is provided in sufficient volume to justify the proposed clinical trial.

**9. Justification for the choice of discipline:** This discipline, like the Standard, is part of a quality assurance system and sets out the rules for conducting research with human participation as a subject, as well as documenting and presenting the results of such research. The principles set out in this Standard also apply to clinical trials that have an impact on the safety and well-being of the individual who is the subject of the research.

The subject is intended for resident physicians on essential issues of good clinical practice.

**10. Learning outcomes:**

LO1 able to formulate a clinical diagnosis, prescribe a plan for treatment and prevention interventions and evaluate their effectiveness across the entire spectrum of diseases, taking into account the age, gender and problems of the patient based on evidence-based practice

LO2 able to effectively interact with the patient, members of his family and the community in which he lives, with other professionals working in the primary level (social workers, psychologists and other employees in PHC institutions) in order to achieve the best results for the patient

LO3 able to assess risks and use the most effective methods to ensure a high level of safety and quality of medical care during diagnostic and therapeutic interventions.

LO4 able to act within the legal and organizational framework of health system of the Republic of Kazakhstan when carrying out diagnostic, therapeutic and preventive interventions in primary health care, provide basic assistance in emergency situations, work as part of interprofessional teams to implement the nation's health promotion policy

LO5 able to formulate adequate research questions, critically evaluate special literature in the field of family medicine, effectively use international databases in their daily activities, participate in the work of the research team.

LO6 able to study independently and train other members of the professional team, to actively participate in discussions, conferences and other forms of continuous professional development in the field of family medicine.

**11. Prerequisites:** ORP in internship

**12. Postrekvizity** cycles of major disciplines in the 2nd academic year of residency

**13.Literature:**

**the main**

Бөлешов, М. Ә. Қоғамдық денсаулық және денсаулықты сақтау : оқулық / М. Ә. Бөлешов. - Алматы : Эверо, 2015. - 244 бет с.

Лисицын, Ю. П. Общественное здоровье и здравоохранение: учебник / Ю. П. Лисицын, Г. Э. Улумбекова. - 3-е изд., перераб. и доп. ; . ГОУ ВПО "Первый гос. мед.ун-т им. И. М. Сеченова". - М. : ГЭОТАР - Медиа, 2015. - 544 с.

Медик, В. А. Общественное здоровье и здравоохранение: учебник / В. А. Медик, В. К. Юрьев. - 2-е изд., испр. и доп. ; Рек. ГОУ ВПО "Моск. мед.акад. им. И. М. Сеченова". - М. : ГЭОТАР - Медиа, 2014. - 608 с. : ил. - Барлығы:200

## Additional

Аканов, А. А. Первичная медико-санитарная помощь. Часть II. Анализ ПМСП Казахстана : монография / А. А. Аканов, Т. С. Мейманалиев. - ; - Алматы : Эверо, 2014. - 112 с

Рахыпбеков, Т. К. Основные принципы формирования информационной системы здравоохранения с персонализированным учетом населения [Текст] : моногр. / Т. К. Рахыпбеков - Алматы : Эверо, 2012. - 208 с

Аканов, А. Здоровье населения и здравоохранения Республики Казахстан = The White Paper-2 : монография / А. Аканов, Т. Мейманалиев, К. Тулебаев. - ; Рек. к изд. Учен. советом КазНМУ им. С. Д. Асфендиярова. - Алматы : Эверо, 2014. - 85 с. Барлығы:6

## Electronic publications

<https://zan.kz/ru/приказ> Министра здравоохранения Республики Казахстан от 27 июля 2018 года № 461 Основные направления развития первичной медико-санитарной помощи в Республике Казахстан на 2018-2022 годы

<https://zan.kz/ru> Қазақстан Республикасы Денсаулық сақтау министрінің 2018 жылғы 27 шілдедегі № 461 Қазақстан Республикасында медициналық-санитариялық алғашқы көмекті дамытудың 2018-2022 арналған негізгі бағыттары

Денсаулықты нығайту Гусманова Л.К. , 2020/<https://aknurpress.kz/login>

Қоғамдық денсаулықты сақтау. Сарсенбаева Г.Ж. , 2019/<https://aknurpress.kz/login>

Жахеева, М.Б., Бекмагамбетов, О.А. Факторы инновационного развития здравоохранения. // Наука. - 2015. - № 1. - С.200-202. /<http://rmebrk.kz/>

Блюмин, Аркадий Михайлович. Мировые информационные ресурсы [Текст] : учеб. пособие / А. М. Блюмин, Н. А. Феоктистов; М-во образования и науки РФ, Ин-т гос. упр., права и инновац. технологий. - 2-е изд. - М. : Дашков и К°, 2013. - 294, [1] с. <http://elib.kaznu.kz/>

1. **Department:** Family Medicine

2. **Level of training** - residency

3. **Of educational programs:** 7R01138 Family Medicine

4. **Course I**, number of credits – 2, number of hours - 60

5. **The name of the elective discipline** Rational pharmacotherapy in the practice of a family doctor

6. **Goal:** training of a family doctor with skills related to the methods of therapy and the rational use of drugs used in the treatment of diseases at the PHC level, taking into account the clinical protocols of the Republic of Kazakhstan and international treatment standards.

7. **The content of the discipline:** Goals and objectives of the rational use of drugs used in the treatment of diseases at the PHC level, taking into account the evidence base of drugs. Rational pharmacotherapy in the practice of a family doctor of cardiovascular pathology. Rational pharmacotherapy of diseases of the gastrointestinal tract. Rational pharmacotherapy of respiratory organs and allergies. Rational pharmacotherapy for endocrine and rheumatic diseases. Application of unified treatment protocols in pharmacotherapy of diseases of the blood system. Pharmacotherapy for diseases of the urinary system. Features of pharmacotherapy for children, pregnant women and elderly patients.

## 8. Tasks:

- to teach the skills of applying unified clinical treatment protocols as guidelines and recommendations for action, taking into account the levels of evidence in the pharmacotherapy of diseases at the PHC level;
- to form the skills of clinical thinking and an integrated approach in choosing an individual rational pharmacotherapy for diseases of patients with comorbid conditions based on the study of scientific material;

- to teach the skills of filling out the accounting and reporting documentation of the carried out pharmacotherapy of certain nosologies, acceptable for the use of analytical material for scientific purposes.
- to develop skills for teaching patients and their relatives the basic rules of taking necessary drugs for emergency prescription in outpatient settings and at home

**9. Justification for the choice of discipline:** Safety of a medicinal product is a positive characteristic of a medicinal product based on a comparative analysis of its effectiveness and an assessment of the risk of harm to human life and health.

The basic principles of rational pharmacotherapy are validity, minimization, rationality, efficiency, controllability, individualization. Pharmacotherapy must be effective and safe. The effectiveness of a drug is a characteristic of the degree of positive influence of a drug on the

course or duration of a disease, prevention of pregnancy, rehabilitation of patients by internal or external use.

Rational pharmacotherapy is classified as a synthetic discipline; it is based on modern methods of clinical diagnostics, methodology of evidence-based medicine and clinical pharmacology.

The successes of pharmacotherapy of the last decade are closely related to the development of the principles and technologies of evidence-based medicine, on the basis of which justified pharmacotherapy is regulated. The results of the studies (level of evidence A) contribute to the introduction of new technologies into clinical practice aimed at slowing the progression of the disease and delaying severe and lethal complications. Evidence-based medicine justifies and expands the indications for long-term and even lifelong drug use.

The course is intended for resident physicians on basic internal medicine issues.

#### **10. Learning outcomes:**

LO1 able to formulate a clinical diagnosis, prescribe a plan for treatment and prevention interventions and evaluate their effectiveness across the entire spectrum of diseases, taking into account the age, gender and problems of the patient based on evidence-based practice

LO2 able to effectively interact with the patient, members of his family and the community in which he lives, with other professionals working in the primary level (social workers, psychologists and other employees in PHC institutions) in order to achieve the best results for the patient

LO3 able to assess risks and use the most effective methods to ensure a high level of safety and quality of medical care during diagnostic and therapeutic interventions.

LO4 able to act within the legal and organizational framework of health system of the Republic of Kazakhstan when carrying out diagnostic, therapeutic and preventive interventions in primary health care, provide basic assistance in emergency situations, work as part of interprofessional teams to implement the nation's health promotion policy

LO5 able to formulate adequate research questions, critically evaluate special literature in the field of family medicine, effectively use international databases in their daily activities, participate in the work of the research team.

LO6 able to study independently and train other members of the professional team, to actively participate in discussions, conferences and other forms of continuous professional development in the field of family medicine.

**11. Prerequisites:** ORP in internship

**12. Postrekvizity** cycles of major disciplines in the 2nd academic year of residency

#### **14.Literature:**

##### **the main**

1. Калиева, Ш. С. Клиническая фармакология и рациональная фармакотерапия. Том 1 : учебник /. - Алматы : Эверо, 2016. - 460 с



2. Калиева, Ш. С. Клиническая фармакология и рациональная фармакотерапия. Том 2: учебник / Ш. С. Калиева, Н. А. Симохина. - Алматы :Эверо, 2016. - 288 с.
3. Рахимов, Қ. Д. Клиникалық фармакология [Мәтін] : оқу құралы / Қ. Д. Рахимов ; - Алматы : ЖШС "Жания-Полиграф", 2013. - 406 бет.
4. Құлмағамбетов И. Р. Клиникалық фармакология. 1-бөлім : оқу құралы / И. Р. Құлмағамбетов. - Алматы : New book, 2022. - 320 бет
5. Құлмағамбетов И. Р. Клиникалық фармакология. 2-бөлім : оқу құралы / И. Р. Құлмағамбетов. - Алматы : New book, 2022. - 376 бет.
6. Орманов , Н. Ж. Ревматологиялық фармакотерапия [Мәтін] : оқу құралы / Н. Ж. Орманов . - Алматы : ЭСПИ, 2021. - 180 бет

### **Additional**

- 1.Жалпы дәрігерлік практика: ұлттық нұсқаулық. 2 томдық. 1 том [Мәтін] : нұсқаулық / Қазақ тіліне ауд. Қ. Ә. Әлиханова. - М. : ГЭОТАР - Медиа, 2016. - 992 б. с. : ил.
- 2.Жалпы дәрігерлік практика: ұлттық нұсқаулық. 2 томдық. 2 том [Мәтін] : нұсқаулық / Қазақ тіліне ауд. Қ. Ә. Әлиханова. - М. : ГЭОТАР - Медиа, 2016. - 896 б.
- 3.Общая врачебная практика. В 2 т. Т. 1 [Текст] : национальное рук. / под ред. И. Н. Денисова, О. М. Лесняк . - ; Ред. под эгидой АСМОК. - М. : ГЭОТАР - Медиа, 2013. - 976 с
- 4.Общая врачебная практика. В 2 т. Т.2. [Текст] : национальное руководство / ред. И. Н. Денисов. - М. : ГЭОТАР - Медиа, 2016. - 888 с.
- 5.Орманов , Н. Ж. Дәрілердің өзара әсерлесуінің жүктілік, бүйрек және бауыр жетіспеушілігіндегі жағдайы [Мәтін] : оқу құралы / Н. Ж. Орманов , Т. Н. Орманов, Л. Р. Қашқымбаева. - Алматы : Эверо, 2014. - 184 бет
- 6.Фармакология терминдері мен түсініктері. Тезаурус қазақ-орыс тілдерінде [Мәтін] : оқу құралы / ҚР Ұлттық ғылым акад; фармакология және токсикология ин-ты; Фармакология және фармация ассоц. Қаз.-Ресей мед. ун-ті ; Ред. басқ. Қ. Д. Рахимов. - Алматы : Б. ж., 2011. - 449 бет.

### **Electronic publications**

- 1.Жалпы дәрігерлік практика. Ұлттық нұсқаулық. 2 т. Т1. [Электронный ресурс] : оқулық / ред. И. Н. Денисов ; қаз. тіліне ауд. Қ. Ә. Әлиханова. - Электрон. текстовые дан. ( 110Мб). - М. : ГЭОТАР - Медиа, 2016. - 992 бет. эл. опт. диск (CD-ROM).
- 2.Фармакология [Электронный ресурс] : оқу құралы / ред. бас. Г. М. Пичхадзе = Фармакология : учебное пособие / под ред. Г. М. Пичхадзе. - Электрон. текстовые дан. (43.0Мб). - М. : "Литтерра", 2016. - 504 бет с.
- 3.Петров, В. И. Клиническая фармакология и фармакотерапия в реальной врачебной практике мастер- класс [Электронный ресурс] : учебник / В. И. Петров. - Электрон. текстовые дан. (63,5 МБ). - М. : Издательская группа "ГЭОТАР- Медиа", 2011. - 880 с. эл. опт. диск (CD-ROM)
- 4.Харкевич, Д. А. Фармакология [Электронный ресурс] : учебник / Д. А. Харкевич. - 10-е изд., перераб. и доп. - Электрон. текстовые дан. (62,1 МБ). - М. : Изд. группа "ГЭОТАР- Медиа", 2010. - 752 с. эл. опт. диск (CD-ROM). - (Электронный учебник).
- 5.Майский, В. В. Фармакология с общей рецептурой [Электронный ресурс] : учебник для мед. училищ и колледжей / В. В. Майский, Р. Н. Аляутдин. - 3-е изд., доп. и перераб. - Электрон. текстовые дан. (36,1 МБ). - М. : Издательская группа "ГЭОТАР- Медиа", 2011. - 240 с. эл. опт. диск (CD-ROM) : ил. - (Электронный учебник).

6. Клиническая фармакология [Электронный ресурс] : учебник / под ред. В. Г. Кукеса, А. К. Стародубцева. - 3-е изд., перераб. и доп. - Электрон. текстовые дан. (41,8 Мб). - М. : Изд. группа "ГЭОТАР-Медиа", 2012. - 840 с. эл. опт. диск (CD-ROM) : ил. - (Электронный учебник)
7. Гаевый, Михаил Дмитриевич/Фармакология с рецептурой [Текст] : учебник / М. Д. Гаевый, Л. М. Гаевая. - 11-е изд., стер. - М. : ООО "Издательство "Кно Рус", 2016. - 381 с. <https://elib.kaznu.kz/>
8. Федюкович, Николай Иванович/Фармакология [Текст] : учебник / Н. И. Федюкович, Э. Д. Рубан. - 10-е изд., доп. и перераб. - М.: Ростов-на-Дону : Феникс, 2013. - 700, [1] с. <https://elib.kaznu.kz/>
9. Фармакология с основами фармакотерапии Стикеева Р.К. , 2014/ <https://aknurpress.kz/>
10. Фармакология негіздері. Манатова К.К., Уржанов К.Д. , 2018/ <https://aknurpress.kz/>
11. Фармакология негіздері және рецептурасы. Шайдаров М.З., Мұхамбетов Д.Д., Мусин М.Н., Бүркітбаева С.С., Жусупова Г.Д. , 2018/ <https://aknurpress.kz/>
12. Фармакология -I. (ЖАЛПЫ МЕДИЦИНА ФАКУЛЬТЕТТЕРІНІҢ СТУДЕНТТЕРІНЕ АРНАЛҒАН ОҚУ ҚҰРАЛЫ). Стикеева Р.К. , 2014/ <https://aknurpress.kz/>
13. Фармакология-1/Учебное пособие. Стикеева Р.К. , 2014/ <https://aknurpress.kz/>
14. Стикеева, Р.К. Фармакология с основами фармакотерапии: Учебное пособие. - Караганда: АҚНҰР, 2014/ <http://rmebrk.kz/>
15. Фармакология: Учебник . / под ред. А.А. Свистунова, В.В. Тарасова. - М.: Лаборатория знаний, 2017.
16. Фармакология: Қазақ және орыс тілдеренді практикалық сабақтарға арналған = руководство к практическим занятиям на казахском и русском языках. / Г.М. Пичхадзе, Д.М. Кадырова, И.И. Ким, М. Карбаева. - М.: Литгерра, 2017. - 640б. <http://rmebrk.kz/>