

Catalog of elective disciplines

1. Department of Pathology and Forensic Medicine

2. Level of training: Residency

3. Educational program: 7R01134 "Forensic medical examination"

4. Course: 1

5. Name of the elective discipline: Iatrogenic pathology.

6. Number of credits: 4

7. Purpose: To develop skills in forensic medical examination of iatrogenic pathology.

8. Tasks: 1. Training in the skills of conducting forensic medical examination in iatrogenic diseases associated with therapeutic effects: adverse (side) effects of prescribed medicines; excessive prescription of medicines; undesirable drug interactions.

2. Training in the skills of conducting forensic medical examination in iatrogenic diseases associated with therapeutic and surgical interventions: medical errors; painful diagnostic methods; hospital infections; incorrect execution of appointments due to illegible handwriting of a doctor or typos; negligence; under-accounting or lack of information, inadequate equipment, procedures, techniques and methods; 3. Registration of a forensic medical report, a medical death certificate, coding of diseases and causes of death in iatrogenic pathology.

9. The content of the discipline: The procedure for conducting a forensic medical examination in iatrogenic diseases, lifetime and postmortem forensic medical examination and interpretation of data.

10. Justification of the choice of the subject. According to the World Health Organization (WHO) in 2019, millions of patients are harmed and 2.6 million people die each year in low- and middle-income countries alone due to non-compliance with safety rules in the provision of medical care. Worldwide, the personal, social and economic damage caused by harming patients amounts to many trillions of US dollars. According to WHO Director General Dr. T. A. Gebreyesus, every minute in the world at least one person dies from harm while providing medical care.

In the process of providing primary and outpatient medical care, four out of ten patients are harmed. The most serious consequences are caused by errors in diagnosis, in prescribing medicines and their use. Drug errors alone cause damage of about 42 billion US dollars per year. Every year, non-compliance with safety and hygiene rules during surgical interventions causes complications in almost 25% of patients and leads to the death of one million patients during or immediately after surgery. It is estimated that preventive measures designed to ensure patient safety can lead to significant savings in medicines and are much cheaper than treating the consequences of harming patients. Therefore, this topic is relevant and necessary for study in residency.

11. Learning outcomes

LO1 Differentiate the development of iatrogenic diseases during the forensic medical examination of corpses with various signs of violent and nonviolent death

LO2 Differentiate the development of iatrogenic diseases during the forensic medical examination of living persons

Pre - requisites: Forensic medical examination of a corpse, Forensic medical examination of living persons, Medical-forensic and photographic research methods in forensic medicine, Forensic medical examination of biological objects

Post- requisites: Procedural and organizational issues of forensic medical examination, Injuries and death from various types of external influences, Forensic medical examination of histological objects, Forensic medical examination in cases of professional offenses of medical workers.

1. Literature:

Main: Сот медицинасы: ЖООАО: оқулық / Мусабекова С.А. // - Алматы: ЭСПИ, 2023. - 332б.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Жарбосынова, Б. Б.

Сот психиатриясы [Мәтін] : оқу құралы / Б. Б. Жарбосынова, Ғ. М. Құдиярова. - 2-ші бас. - Қарағанды : АҚНҰР, 2019. - 230 бет.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Альмухамбетова, М. К. Сердечно-легочная реанимация на догоспитальном этапе [Текст] : учебное пособие / М. К. Альмухамбетова. - 2-е изд. - Караганда : АҚНҰР, 2019. - 112 с.

Қаныбеков, А.

Жедел медициналық жәрдем [Мәтін] : оқу құралы / А. Қаныбеков. - 2-ші бас. - Қарағанды : АҚНҰР, 2017. - 266 бет

Омаров, Т. Р. Неотложные состояния в клинике внутренних болезней [Текст] : учебное пособие / Т. Р. Омаров, В. А. Омарова. - Караганда : АҚНҰР, 2018. - 518 с

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Муминов, Т. А.

Генетика и эпигенетика [Текст] : учебное пособие / Т. А. Муминов, М. Е. Кулманов. - Алматы : Литерпринт, 2021. - 292 с.

Ньюссбаум, Р. Л. Медициналық генетика [Текст] : оқу құралы / Р. Л. Ньюссбаум, Р. Р. Мак-Иннес, Х. Ф. Виллард; орыс тіліндегі ред. Н. П. Бочков ; Қазақ тіліне ауд. А. А. Төребеков. - М. : ГЭОТАР - Медиа, 2014. - 528 бет. +эл. опт. диск (CD-ROM)

Additional:

Сот-химиялық сараптау және аналитикалық диагностика [Мәтін] : оқу-әдістемелік құрал / С. Қ. Ордабаева [ж.б.]. - Алматы : Эверо, 2016. - 280 бет

Түсіпбекова, М. М.

Киякбаев, Г. К.

Аритмии сердца. Основы электрофизиологии, диагностика, лечение и современные рекомендации [Текст] : монография / Г. К. Киякбаев ; под ред. В. С. Моисеева. - М. : ГЭОТАР - Медиа, 2013. - 240 с.

Жалпы патологиялық үрдістердің морфологиялық атласы [Мәтін] : атлас / М. М. Түсіпбекова. - Алматы : Эверо, 2016. - 188 бет.

Бокерия, Л. А. Внезапная сердечная смерть [Текст] : науч. изд. / Л. А. Бокерия, А. Ш. Ревинши, Н. М. Неминуший. - ; Кн. изд. при содействии Всероссийского науч. о-ва аритмологов. - М. : ГЭОТАР - Медиа, 2013. - 272 с.

Electronic

Түсіпбекова, М. М.

Клиникалық патоморфология [Мәтін] : монография / М. М. Түсіпбекова. - Алматы : Эверо, 2016. - 188 бет.

1. Department of Pathology and Forensic Medicine

2. Level of training: Residency

3. Educational program: 7R01134 "Forensic medical examination"

4. Course: 1

5. Name of the elective discipline: Pathology of emergency conditions.

6. Number of credits: 4

7. Purpose: To develop skills in forensic medical examination of emergency conditions.

8. Tasks: 1. Training in the skills of conducting forensic medical examination in severe disorders of vital functions that pose a threat to human life and require emergency assistance.

2. Training in the skills of ascertaining and determining severe disorders of vital functions that pose a threat to human life and determining the validity of the use of intensive care and resuscitation methods.

3. Registration of autopsy protocols, forensic medical report, medical death certificate, coding of diseases and causes of death in emergency conditions.

4. Training in the conduct of lifetime, morphological diagnostics of emergency situations and interpretation of data in order to establish the circumstances to be proved in a particular case within the framework of the Criminal Procedure Code and the organizational field of the healthcare system of the Republic of Kazakhstan.

9. The content of the discipline: The procedure for conducting a forensic medical examination in severe disorders of vital functions that pose a threat to human life and require emergency care, including using intensive care and resuscitation methods. Such critical conditions include both acute pathologies (poisoning, asphyxia, traumatic shock) and complications of long-term chronic diseases (hypertensive crisis, asthmatic status, diabetic coma, etc.). Morphological diagnosis and interpretation of data.

10. Justification of the choice of the subject. In forensic medical practice, the diagnosis of emergency conditions is an important component, since forensic experts work in conditions where it is necessary to differentiate types of emergency conditions, such as TRALI syndrome, abdominal compartment syndrome, Addison's crisis, obstetric sepsis, alcoholic coma, alcoholic delirium, anaphylactic shock, apnea of premature infants, arrhythmia, arterial bleeding, asthmatic status, asphyxia, newborn asphyxia, venous bleeding, sudden cardiac death, internal bleeding, intracranial birth injury, air embolism, hemorrhagic stroke, hemorrhagic shock, etc. Life-threatening conditions differ in their causes and leading mechanism, therefore, knowledge and consideration of the etiopathogenesis of critical life disorders are extremely important, since they allow us to diagnose the correctness of the algorithm of medical care and evaluate it depending on the damaging factor, as well as take into account the development of emergency conditions with other types of damaging factors requiring forensic medical examination.

11. Learning outcomes

LO1 Differentiate the development of emergency conditions during the forensic medical examination of corpses with various signs of violent and nonviolent death

LO2 Differentiate the development of emergency conditions during the forensic medical examination of living persons

Pre - requisites: Forensic medical examination of a corpse, Forensic medical examination of living persons, Medical-forensic and photographic research methods in forensic medicine, Forensic medical examination of biological objects

Post- requisites: Procedural and organizational issues of forensic medical examination, Injuries and death from various types of external influences, Forensic medical examination of histological objects, Forensic medical examination in cases of professional offenses of medical workers.

1. Literature:

Main: Сот медицинасы: ЖООАО: окулық / Мусабекова С.А. // - Алматы: ЭСПИ, 2023. - 332б.
Сот медицинасы [Мәтін] : окулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Жарбосынова, Б. Б.

Сот психиатриясы [Мәтін] : оқу құралы / Б. Б. Жарбосынова, Ғ. М. Құдиярова. - 2-ші бас. - Қарағанды : АҚНҰР, 2019. - 230 бет.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Альмухамбетова, М. К. Сердечно-легочная реанимация на догоспитальном этапе [Текст] : учебное пособие / М. К. Альмухамбетова. - 2-е изд. - Караганда : АҚНҰР, 2019. - 112 с.

Қаныбеков, А.

Жедел медициналық жәрдем [Мәтін] : оқу құралы / А. Қаныбеков. - 2-ші бас. - Караганды : АҚНҰР, 2017. - 266 бет

Омаров, Т. Р. Неотложные состояния в клинике внутренних болезней [Текст] : учебное пособие / Т. Р. Омаров, В. А. Омарова. - Караганда : АҚНҰР, 2018. - 518 с

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Муминов, Т. А.

Генетика и эпигенетика [Текст] : учебное пособие / Т. А. Муминов, М. Е. Кулманов. - Алматы : Литерпринт, 2021. - 292 с.

Ньюссбаум, Р. Л. Медициналық генетика [Текст] : оқу құралы / Р. Л. Ньюссбаум, Р. Р. Мак-Иннес, Х. Ф. Виллард; орыс тіліндегі ред. Н. П. Бочков ; Қазақ тіліне ауд. А. А. Төребеков. - М. : ГЭОТАР - Медиа, 2014. - 528 бет. +эл. опт. диск (CD-ROM)

Additional:

Сот-химиялық сараптау және аналитикалық диагностика [Мәтін] : оқу-әдістемелік құрал / С. Қ. Ордабаева [ж.б.]. - Алматы : Эверо, 2016. - 280 бет

Түсіпбекова, М. М.

Киякбаев, Г. К.

Аритмии сердца. Основы электрофизиологии, диагностика, лечение и современные рекомендации [Текст] : монография / Г. К. Киякбаев ; под ред. В. С. Моисеева. - М. : ГЭОТАР - Медиа, 2013. - 240 с.

Жалпы патологиялық үрдістердің морфологиялық атласы [Мәтін] : атлас / М. М. Түсіпбекова. - Алматы : Эверо, 2016. - 188 бет.

Бокерия, Л. А. Внезапная сердечная смерть [Текст] : науч. изд. / Л. А. Бокерия, А. Ш. Ревиншвили, Н. М. Неминуций. - ; Кн. изд. при содействии Всероссийского науч. о-ва аритмологов. - М. : ГЭОТАР - Медиа, 2013. - 272 с.

Electronic Түсіпбекова, М. М.

Клиникалық патоморфология [Мәтін] : монография / М. М. Түсіпбекова. - Алматы : Эверо, 2016. - 188 бет.

1. Department of Pathology and Forensic Medicine

2. Level of training: Residency

3. Educational program: 7R01134 "Forensic medical examination"

4. Course: 1

5. Name of elective discipline: Genetic expertise in forensic medicine

6. Number of credits: 4

7. Purpose: To develop skills in organizing a procedural action consisting of genetic expertise in forensic medicine.

8. Tasks: 1. Training in the use of molecular genetic analysis methods for the evidentiary identification of a person and the establishment of his blood relations in the forensic examination of physical evidence of biological nature.

2. Training in conducting a forensic genetic examination to establish the true parents of a child in cases of disputed parentage of children (challenging paternity/motherhood or substitution of children).

3. Acquisition of skills in establishing family relations on the maternal and/or paternal side.

4. Training in conducting forensic identification of unidentified remains.

5. Identification of the belonging of organs and biological tissues (blood, sperm, saliva, hair) to a specific person; identification of the sex of biological traces;

isolation of individual DNA for the purpose of further identification with the objects of crimes and accidents.

9. The content of the discipline: The procedure for conducting a forensic molecular genetic examination, which is carried out in order to identify a person's identity and establish a blood biological relationship based on special knowledge in the field of criminology, molecular biology and human genetics; conducting forensic identification of unidentified remains. Identification of the belonging of organs and biological tissues (blood, sperm, saliva, hair) to a specific person; identification of the sex of biological traces; isolation of individual DNA for the purpose of further identification with the objects of crimes and accidents.

10. Justification of the choice of the subject. In forensic medical practice, genetic examination is one of the priorities. In accordance with the Constitution of the Republic of Kazakhstan, every person and citizen is guaranteed the protection of their rights and freedoms. Conducting molecular genetic expertise in solving cases involving sexual crimes against minors plays an important role. Molecular genetic examination is one of the main studies that allows for the identification of DNA of persons involved in the case with maximum accuracy and has a wide range of studies of various objects of biological origin. As a result of the conducted research, the SMGE expert establishes the individual identity of the bio-layers containing DNA found on the presented material evidence, as a result of which it is possible to establish the involvement of certain persons in this crime. DNA examination is an effective investigative tool that can be used in a broader context with all other evidence in the case. An integrated and competent approach to the selection and examination of physical evidence during the investigation of sexual crimes will increase the effectiveness of the SMGE in identifying traces of sexual violence and thereby improve the quality of the investigation, and hence the objectivity of the consideration of cases in court. The final decision on the involvement of a particular person in the event, based on the conclusion of a molecular genetic examination, is made by the investigating authorities and the court, taking into account all the materials and circumstances of the case.

11. Learning outcomes

1. To use the methods of molecular genetic analysis for the evidentiary identification of a person and the establishment of his blood relationship during the forensic medical examination of physical evidence of a biological nature.

2. Conduct a forensic genetic examination to establish the true parents of the child in cases of a disputed percentage of children (challenging paternity / motherhood or substitution of children).

3. Establish maternal and/or paternal family ties.

4. Identify unidentified remains.

5. To establish the affiliation of organs and biological tissues (blood, sperm, saliva, hair) to a specific person, gender by biological traces.

6. To isolate individual DNA for the purpose of further identification with the objects of crimes and accidents.

Pre - requisites: Forensic medical examination of a corpse, Forensic medical examination of living persons, Medical-forensic and photographic research methods in forensic medicine, Forensic medical examination of biological objects

Post- requisites: Procedural and organizational issues of forensic medical examination, Injuries and death from various types of external influences, Forensic medical examination of histological objects, Forensic medical examination in cases of professional offenses of medical workers..

1. Literature:

Main: Сот медицинасы: ЖООАО: оқулық / Мусабекова С.А. // - Алматы: ЭСПИ, 2023. - 332б.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Жарбосынова, Б. Б.

Сот психиатриясы [Мәтін] : оқу құралы / Б. Б. Жарбосынова, Ф. М. Құдиярова. - 2-ші бас. - Қарағанды : АҚНҰР, 2019. - 230 бет.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Альмухамбетова, М. К. Сердечно-легочная реанимация на догоспитальном этапе [Текст] : учебное пособие / М. К. Альмухамбетова. - 2-е изд. - Караганда : АҚНҰР, 2019. - 112 с.

Қаныбеков, А.

Жедел медициналық жәрдем [Мәтін] : оқу құралы / А. Қаныбеков. - 2-ші бас. - Карағанды : АҚНҰР, 2017. - 266 бет

Омаров, Т. Р. Неотложные состояния в клинике внутренних болезней [Текст] : учебное пособие / Т. Р. Омаров, В. А. Омарова. - Караганда : АҚНҰР, 2018. - 518 с

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Муминов, Т. А.

Генетика и эпигенетика [Текст] : учебное пособие / Т. А. Муминов, М. Е. Кулманов. - Алматы : Литерпринт, 2021. - 292 с.

Ньюссбаум, Р. Л. Медициналық генетика [Текст] : оқу құралы / Р. Л. Ньюссбаум, Р. Р. Мак-Иннес, Х. Ф. Виллард; орыс тіліндегі ред. Н. П. Бочков ; Қазақ тіліне ауд. А. А. Төребеков. - М. : ГЭОТАР - Медиа, 2014. - 528 бет. +эл. опт. диск (CD-ROM)

Additional:

Сот-химиялық сараптау және аналитикалық диагностика [Мәтін] : оқу-әдістемелік құрал / С. Қ. Ордабаева [ж.б.]. - Алматы : Эверо, 2016. - 280 бет

Түсіпбекова, М. М.

Киякбаев, Г. К.

Аритмии сердца. Основы электрофизиологии, диагностика, лечение и современные рекомендации [Текст] : монография / Г. К. Киякбаев ; под ред. В. С. Моисеева. - М. : ГЭОТАР - Медиа, 2013. - 240 с.

Жалпы патологиялық үрдістердің морфологиялық атласы [Мәтін] : атлас / М. М. Түсіпбекова. - Алматы : Эверо, 2016. - 188 бет.

Бокерия, Л. А. Внезапная сердечная смерть [Текст] : науч. изд. / Л. А. Бокерия, А. Ш. Ревишвили, Н. М. Неминуций. - ; Кн. изд. при содействии Всероссийского науч. о-ва аритмологов. - М. : ГЭОТАР - Медиа, 2013. - 272 с.

Electronic Түсіпбекова, М. М.

1. Department of Pathology and Forensic Medicine

2. Level of training: Residency

3. Educational program: 7R01134 "Forensic medical examination"

4. Course: 1

5. Name of the elective discipline: Forensic medical examination of maternal mortality.

6. Number of credits: 4

7. Purpose: To develop skills in organizing a procedural action consisting of a forensic medical examination of maternal death, taking into account the examination of antenatal, intra- and postnatal fetal death.

8. Tasks: 1. Training in the skills of conducting a forensic medical examination in case of maternal death.

2. Training in the skills of ascertaining and determining antenatal, intra- and postnatal fetal death according to fetal autopsy data.

3. Registration of autopsy protocols, forensic medical report, medical death certificate, coding of diseases and causes of death

4. Training in conducting a pathomorphological study in case of maternal death, morphological diagnosis and interpretation of data in order to establish the circumstances to be proved in a specific case within the framework of the Criminal Procedure Code and the organizational field of the healthcare system of the Republic of Kazakhstan.

9. The content of the discipline: The procedure for conducting a forensic medical examination in case of maternal death. Execution of autopsy protocols, forensic medical report, medical death certificate, peculiarities of coding diseases and causes of death in maternal death. Morphological diagnosis and interpretation of data.

10. Justification of the choice of the subject. In forensic medical and pathoanatomical practice, the examination of maternal death is one of the priorities. There has been an increase in the maternal mortality rate in the last three years in Kazakhstan. The Republic plans to approve the Concept of development of the maternal and child health service in the Republic of Kazakhstan for 2023-2030 "Every woman is every child", the correspondent of MIA Kazinform reports. The relevant Government decree has been posted for public discussion on the Open NPAs portal.

According to the data provided in the document, over the past 5 years, the population of the Republic of Kazakhstan has increased by 8.8% and as of January 1, 2022 amounted to 19,122,423 people, of which 9,835,645 (51.4%) are female. The number of women of fertile age (the period in a woman's life during which she is capable of bearing and giving birth to a child) is 4,417,460, children (from 0 to 18 years old) – 6,485,507, including adolescents (15-17 years old) – 814,523.

"Maternal mortality (MS) is one of the sensitive indicators of the health system. Since 2000, there has been a higher rate of accelerated decline in the MS index in the world, 5.5% per year, 6.2% in the Republic of Kazakhstan. In dynamics in Kazakhstan over the past 10 years, MS declined by 2.4 times (from 36.8 per 100 thousand live births in 2009 to 13.7 in 2019)," according to the draft concept.

It is noted that the reduction in maternal mortality over the past decade has been achieved through the introduction of effective perinatal technologies, new clinical protocols, as well as the improvement of emergency care, including the regionalization of perinatal care.

"However, since 2020, there has been an increase in the maternal mortality rate, which is associated with the COVID-19 pandemic. By the end of 2021, the maternal mortality rate in

Kazakhstan increased by 22% and amounted to 44.7 per 100 thousand live births against 36.5 in 2020," the document says.

Pneumonia and coronavirus infection accounted for 70% of the causes of maternal mortality. The increase in "excess" deaths from COVID-19 is associated with an infectious agent, high pathogenicity of the delta coronavirus strain, severe and lightning-fast course of the disease, somatic health of mothers, peculiarities of the physiological state of pregnant women and post-ovarian complications.

Obstetric bleeding prevails in the structure of direct causes of maternal mortality (37%), which were the result of uterine atony, pathological attachment of the placenta, and injuries during childbirth. The mortality rate from complications of severe preeclampsia/eclampsia due to poor-quality prenatal care is also not reduced, the document notes.

11. Learning outcomes

LO1. Conducts a forensic medical examination of maternal death within the framework of the Criminal Procedure Code and the organizational field of the healthcare system of the Republic of Kazakhstan.

LO2. Evaluates forensic medical data for antenatal, intra- and postnatal fetal death, signs of infanticide during the examination of the afterbirth at autopsy and according to medical documentation

LO3. Draws up an autopsy report, a forensic medical report, a medical death certificate, encodes diseases and causes of death in case of maternal death.

LO4. Conducts forensic medical examinations according to autopsy data and medical documentation.

LO5. Assesses the presence of criminal interventions during pregnancy, childbirth and the postpartum period

LO6. Interacts with relatives of the deceased, judicial and investigative authorities and health authorities

Pre - requisiters: Forensic medical examination of a corpse, Forensic medical examination of living persons, Medical-forensic and photographic research methods in forensic medicine, Forensic medical examination of biological objects

Post- requisiters: Procedural and organizational issues of forensic medical examination, Injuries and death from various types of external influences, Forensic medical examination of histological objects, Forensic medical examination in cases of professional offenses of medical workers.

1. Literature:

Main: Сот медицинасы: ЖООАО: оқулық / Мусабекова С.А. // - Алматы: ЭСПИ, 2023. - 332б.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Жарбосынова, Б. Б.

Сот психиатриясы [Мәтін] : оқу құралы / Б. Б. Жарбосынова, Ғ. М. Құдиярова. - 2-ші бас. - Карағанды : АҚНҰР, 2019. - 230 бет.

Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Альмухамбетова, М. К. Сердечно-легочная реанимация на догоспитальном этапе [Текст] : учебное пособие / М. К. Альмухамбетова. - 2-е изд. - Караганда : АҚНҰР, 2019. - 112 с.

Қаныбеков, А.

Жедел медициналық жәрдем [Мәтін] : оқу құралы / А. Қаныбеков. - 2-ші бас. - Карағанды : АҚНҰР, 2017. - 266 бет

Омаров, Т. Р. Неотложные состояния в клинике внутренних болезней [Текст] : учебное пособие / Т. Р. Омаров, В. А. Омарова. - Караганда : АҚНҰР, 2018. - 518 с
Сот медицинасы [Мәтін] : оқулық / қаз. тіл. ауд. А. К. Есенгабулова ; ред. басқ. Ю. И. Пиголкин. - М. : ГЭОТАР - Медиа, 2017. - 576 бет.

Муминов, Т. А.

Генетика и эпигенетика [Текст] : учебное пособие / Т. А. Муминов, М. Е. Кулманов. - Алматы : Литерпринт, 2021. - 292 с.

Ньюссбаум, Р. Л. Медициналық генетика [Текст] : оқу құралы / Р. Л. Ньюссбаум, Р. Р. Мак-Иннес, Х. Ф. Виллард; орыс тіліндегі ред. Н. П. Бочков ; Қазақ тіліне ауд. А. А. Төребеков. - М. : ГЭОТАР - Медиа, 2014. - 528 бет. +эл. опт. диск (CD-ROM)

Additional:

Сот-химиялық сараптау және аналитикалық диагностика [Мәтін] : оқу-әдістемелік құрал / С. Қ. Ордабаева [ж.б.]. - Алматы : Эверо, 2016. - 280 бет

Түсіпбекова, М. М.

Киякбаев, Г. К.

Аритмии сердца. Основы электрофизиологии, диагностика, лечение и современные рекомендации [Текст] : монография / Г. К. Киякбаев ; под ред. В. С. Моисеева. - М. : ГЭОТАР - Медиа, 2013. - 240 с.

Жалпы патологиялық үрдістердің морфологиялық атласы [Мәтін] : атлас / М. М. Түсіпбекова. - Алматы : Эверо, 2016. - 188 бет.

Бокерия, Л. А. Внезапная сердечная смерть [Текст] : науч. изд. / Л. А. Бокерия, А. Ш. Ревитшвили, Н. М. Неминуший. - ; Кн. изд. при содействии Всероссийского науч. о-ва аритмологов. - М. : ГЭОТАР - Медиа, 2013. - 272 с.

Electronic Түсіпбекова, М. М.

Клиникалық патоморфология [Мәтін] : монография / М. М. Түсіпбекова. - Алматы : Эверо, 2016. - 188 бет.