1. General information on the course

Full course name	History of Medicine
Full official name of a higher education institution	Sumy State University
Full name of a structural unit	Academic and Research Medical Institute. Кафедра громадського здоров'я
Author(s)	Liubchak Vladyslav Viktorovych
Cycle/higher education level	The Second Level Of Higher Education, National Qualifications Framework Of Ukraine – The 7th Level, QF-LLL – The 7th Level, FQ-EHEA – The Second Cycle
Semester	18 weeks during the 3rd semester or 20 weeks during the 4th semester
Workload	The volume of the discipline is 5 ECTS credits, 150 hours, of which 36 hours is contact work with the teacher (36 hours of practical classes), 114 hours is independent work
Language(s)	English

2. Place in the study programme

Relation to curriculum	Elective course available for study programme "Medicine"
Prerequisites	There are no specific pre-requisites
Additional requirementsThere are no specific requirements	
Restrictions	There are no specific restrictions

3. Aims of the course

The purpose of the discipline is the formation of theoretical knowledge about the formation of the history of medicine from primitive society to modern times.

4. Contents

Topic 1 History of medicine as a science and a subject of teaching. Periodization and historical sources. Treatment in primitive society.

History of medicine as a science and academic discipline. Sections of the history of medicine. Periodization in the history of medicine: definition of periodization, periodization of world history of medicine, separate medical disciplines, history of medicine of separate countries, separate regions of the country (medical centers, bases, organizations). Periodization and chronology of world history of medicine: periods, chronological framework, absolute age. Periodization and chronology of primitive society. Sources from the history of initial treatment. Formation of initial treatment. Treatment during the heyday of primitive society. Treatment during the collapse of primitive society. The main features of treatment in the countries of the ancient world.

Topic 2 Treatment in the countries of the Ancient East

Periodization and chronology of treatment in Mesopotamia. Sources on the history of treatment in Mesopotamia. Treatment in Sumer. Treatment in Babylonia and Assyria. The influence of mythology on healing in Babylonia and Assyria. Periodization and chronology of treatment in Ancient Egypt. Sources for studying the history of treatment in ancient Egypt. Treatment in Ancient Egypt. The influence of mythology on healing in Ancient Egypt. Periodization and chronology of treatment in ancient India. Sources of studying the history of treatment in ancient India. Sanitary business of the period of the Harappan civilization of Ancient India. Treatment in the Vedic period of ancient India. Treatment in the classical period of ancient India. Periodization and chronology of treatment in ancient China. Sources for studying the history of treatment in ancient India.

Topic 3 Treatment and medicine in the countries of the ancient Mediterranean

Periodization and chronology of treatment in ancient Greece. Sources on the history of treatment in ancient Greece. The influence of mythology on healing in ancient Greece. Treatment of the Cretan-Mycenaean period of Ancient Greece. Treatment of the pre-forest period of Ancient Greece. Treatment of the polis period of ancient Greece. Croton Medical School of Ancient Greece. Cnidus Medical School of Ancient Greece. Sicilian Medical School of Ancient Greece. Koss Medical School of Ancient Greece. Hippocrates and its importance for the development of medicine. "Hippocratic collection" - the history of creation and content. Medical ethics of ancient Greece. Medicine of the Hellenistic period of ancient Greece. Periodization and chronology of treatment in ancient Rome. Sources on the history of treatment in ancient Rome. Treatment during the tsarist period in ancient Rome. Sanitary business in Ancient Rome (period of the Republic). Organization of medical affairs of the Republic period in Ancient Rome. The role of Asclepiad in the development of medicine. Military medicine of the empire period in ancient Rome. Medical business of the empire period in ancient Rome. Aulus Cornelius Celsus and his works. The role of Dioscorides Pedanius of Cilicia and Soran of Ephesus in the development of medicine. fis teachings and Galenism. Topic 4 Medicine of the early and developed Middle Ages (V-XV centuries)

Medicine of the Byzantine Empire: sanitary facilities. Byzantine science and religion. Oribasius of Pergamum and his works. Aetius of Amida and his works. Alexander of Thrall and his works. Paul with Fr. Aegina and his works. Medical business in the Byzantine Empire. Medical education in the Byzantine Empire. Periods of the history of medicine of the Caliphate. Arabic culture and medicine: translations of medical works into Arabic, centers of medical science and higher education. Abu Bakr Ar-Razi and his works. Development of the doctrine of eye diseases in Arabic-speaking caliphates. Development of anatomy and physiology in the Arab caliphates. The role of Abu al-Qasim az-Zahrawi in the development of medicine. Medical business in the Arabic-speaking East. Abu Ali Ibn Sina's contribution to the development of medicine. Salerno Medical School. Medical school in Montpellier. Medical Faculty of the University of Bologna and its teachers. Fighting epidemics of infectious diseases in Western Europe during the early and advanced Middle Ages

Topic 5 Medicine of the late Middle Ages (XV - XVII centuries.).

Andreas Vesalius and his works. Miguel Napkin: medical views and medical works. Realdo Colombo, Gabriel Fallopius, Jerome Fabricius, Bartolomeo Eustachius and their works. Formation of physiology as a science. Iatrophysical, iatromechanical and iatromathematical direction in medicine. The contribution of Paracelsus (Theophrastus von Hohenhain) in the development of medicine. D. Fracastoro's contribution to the development of medicine. Features of surgical care in medieval Europe. Three categories of surgeons. Ambroise Pare's contribution to the development of medicine

Topic 6 Medicine of Kievan Rus. Medicine in the period of fragmentation of and the development of feudal relations. Ukraine and the problem of the Northern Renaissance

Written sources for the study of medicine of Kievan Rus. Treatment in Kievan Rus before the adoption of Christianity. Monastic medicine in Kievan Rus. Activities of monks. Secular medicine in Kievan Rus. Sanitation, epidemics and their control in Kievan Rus. Written sources for the study of medicine of the Russian state of the XV-XVII centuries. Medicine and medical business in the Western Ukrainian lands in the XIII-XVII centuries. Epidemics and the fight against them in the Russian state until the nineteenth century. The first pharmacies and pharmacy order in the Moscow state. Training of doctors in the Moscow state in the XV-XVII centuries. Monastic and civic hospitals in the Moscow state in the XV-XVII centuries. Features of medical business in the Russian state in the XVIII century. Georgy Drohobych (Kotermak) his life and work. Features of training of doctors in the Russian state in the XVIII century. Nestor Maksymovych - Ambodik and his contribution to national medicine. Danilo Samoilovich Samoilovich and his contribution to domestic medicine. Dissemination and establishment of Renaissance and humanistic ideas in Ukraine. Medical education in Ukraine. Zamaiska Academy. The emergence of fraternities (Lviv, Kyiv, 1615, Lutsk, 1617). Cultural and educational activities of fraternities. Printing business. Fraternal schools. Public medicine. Monastic and fraternal hospitals. Craft (shop) medicine.

Topic 7 Medical and biological direction in modern medicine

Dutch anatomical school. Anatomists of the Russian state of the XVIII century. Development of anatomy in the Russian Empire in the XIX century. Domicroscopic period of histology development. Microscopic period of histology development. Embryology of modern times. Macroscopic period of pathological anatomy development. Karl Rokytansky and his contribution to the development of medicine. The role of Rudolf Virchow in the development of medicine. Pathological anatomy and pathological physiology in the Russian state in the XIX century. History of vaccinations. Ignac Semmelweis and his contribution to the development of medicine. Joseph Lister and his contribution to the development of medicine. Louis Pasteur and his works. Cellular (phagocytic) and humoral theory of immunity. The development of microbiology in France in the XIX century. Development of physiology in Germany in the XIX century. IM Sechenov and his works. The teachings of IP Pavlov on conditioned reflexes and higher nervous activity.

Topic 8 Modern medicine: clinical disciplines, hygiene and social medicine

Introduction of clinical teaching in Western Europe. Thermometers and introduction of thermometry in clinical practice. Percussion: direct and indirect. Auscultation: direct (direct) and indirect. The development of medical education in the Russian state in the XIX century. - early twentieth century. The development of internal medicine in Russia in the early nineteenth century. The founder of the scientific therapeutic school is Serhiy Petrovich Botkin. Vasyl Parmenovych Obraztsov - his life and work. Zemsky medicine in the Russian Empire. Stepan Fomych Hotovytsky: life and activity. Contribution to the development of medicine by Neil Filarovich Filatov. The role of Philip Pinel in the development of medicine. Sergei Sergeevich Korsakov - life and work. The doctrine of blood transfusion. Modern surgery in Western Europe. Activity of Efrem Osipovich Mukhin. Contribution to the development of medicine of Nikolai Ivanovich Pirogov. Discovery and introduction of anesthesia. Life and activity of Mykola Vasyliovych Sklifosovsky. Development of obstetrics in Western Europe of modern times. Obstetrics and gynecology in Russia in the XIX century. The emergence of demographic statistics. Formation of professional hygiene. The development of public hygiene in Western Europe in the eighteenth and nineteenth centuries. Formation of experimental hygiene in Western Europe. Experimental hygiene in the Russian Empire in the XIX century. Medic

Topic 9 History of industrial medicine and blood service

Features of industrial medicine. Sources of industrial medicine. Development of industrial medicine and blood service. History of the blood service of Ukraine. Prospects for the development of industrial medicine and blood service

5. Intended learning outcomes of the course

LO1	Understand the basic development patterns of medical knowledge in human society at the stages of its historical development
LO2	Objectively assess the development and state of medical affairs in Ukraine
LO3	Determine the significance of major historical and medical events in relation to the future specialty
LO4	Use in practice the achievements of medicine of the past

After successful study of the course, the student will be able to:

7. Teaching and learning activities

7.1 Types of training

Topic 1. History of medicine as a science and a subject of teaching. Periodization and historical sources. Treatment in primitive society.

pr.tr.1 "History of medicine as a science and a subject of teaching. Periodization and historical sources. Treatment in primitive society." (full-time course)

History of medicine as a science and academic discipline. Sections of the history of medicine. Periodization in the history of medicine: definition of periodization, periodization of world history of medicine, separate medical disciplines, history of medicine of separate countries, separate regions of the country (medical centers, bases, organizations). Periodization and chronology of world history of medicine: periods, chronological framework, absolute age. Periodization and chronology of primitive society.

pr.tr.2 "Treatment in primitive society" (full-time course)

Sources from the history of initial treatment. Formation of initial treatment. Treatment during the heyday of primitive society. Treatment during the collapse of primitive society. The main features of treatment in the countries of the ancient world.

Topic 2. Treatment in the countries of the Ancient East

pr.tr.3 "Treatment in the countries of the Ancient East" (full-time course)

Periodization and chronology of treatment in Mesopotamia. Sources on the history of treatment in Mesopotamia. Treatment in Sumer. Treatment in Babylonia and Assyria. The influence of mythology on healing in Babylonia and Assyria.

pr.tr.4 "Treatment in Ancient India and China" (full-time course)

Periodization and chronology of treatment in ancient India. Sources of studying the history of treatment in ancient India. Sanitary business of the period of the Harappan civilization of Ancient India. Treatment in the Vedic period of ancient India. Treatment in the classical period of ancient India. Periodization and chronology of treatment in ancient China. Sources for studying the history of treatment in ancient China. Treatment in Ancient China

Topic 3. Treatment and medicine in the countries of the ancient Mediterranean

pr.tr.5 "Treatment and medicine in the countries of the ancient Mediterranean" (full-time course)

Periodization and chronology of treatment in ancient Greece. Sources on the history of treatment in ancient Greece. The influence of mythology on healing in ancient Greece. Treatment of the Cretan-Mycenaean period of Ancient Greece. Treatment of the pre-forest period of Ancient Greece. Treatment of the polis period of ancient Greece. Croton Medical School of Ancient Greece. Cnidus Medical School of Ancient Greece. Sicilian Medical School of Ancient Greece. Koss Medical School of Ancient Greece. Hippocrates and its importance for the development of medicine. "Hippocratic collection" - the history of creation and content. Medical ethics of ancient Greece. Medicine of the Hellenistic period of ancient Greece. pr.tr.6 "Treatment and medicine in ancient Rome" (full-time course)

Periodization and chronology of treatment in ancient Rome. Sources on the history of treatment in ancient Rome. Treatment during the tsarist period in ancient Rome. Sanitary business in Ancient Rome (period of the Republic). Organization of medical affairs of the Republic period in Ancient Rome. The role of Asclepiad in the development of medicine. Military medicine of the empire period in ancient Rome. Medical business of the empire period in ancient Rome. Aulus Cornelius Celsus and his works. The role of Dioscorides Pedanius of Cilicia and Soran of Ephesus in the development of medicine. Galen: his teachings and Galenism.

Topic 4. Medicine of the early and developed Middle Ages (V-XV centuries)

pr.tr.7 "Medicine of the early Middle Ages" (full-time course)

Medicine of the Byzantine Empire: sanitary facilities. Byzantine science and religion. Oribasius of Pergamum and his works. Aetius of Amida and his works. Alexander of Thrall and his works. Paul with Fr. Aegina and his works. Medical business in the Byzantine Empire. Medical education in the Byzantine Empire. Periods of the history of medicine of the Caliphate. Arabic culture and medicine: translations of medical works into Arabic, centers of medical science and higher education. Abu Bakr Ar-Razi and his works. Development of the doctrine of eye diseases in Arabic-speaking caliphates. Development of anatomy and physiology in the Arab caliphates. The role of Abu al-Qasim az-Zahrawi in the development of medicine.

pr.tr.8 "Medicine of the advanced Middle Ages" (full-time course)

Medical business in the Arabic-speaking East. Abu Ali Ibn Sina's contribution to the development of medicine. Salerno Medical School. Medical school in Montpellier. Medical Faculty of the University of Bologna and its teachers. Fighting epidemics of infectious diseases in Western Europe during the early and advanced Middle Ages

Topic 5. Medicine of the late Middle Ages (XV - XVII centuries.).

pr.tr.9 "Medicine of the late Middle Ages (XV - XVII centuries.)." (full-time course)

Andreas Vesalius and his works. Miguel Napkin: medical views and medical works. Realdo Colombo, Gabriel Fallopius, Jerome Fabricius, Bartolomeo Eustachius and their works. Formation of physiology as a science. Iatrophysical, iatromechanical and iatromathematical direction in medicine. The contribution of Paracelsus (Theophrastus von Hohenhain) in the development of medicine. D. Fracastoro's contribution to the development of medicine.

pr.tr.10 "Surgical care in medieval Europe" (full-time course)

Features of surgical care in medieval Europe. Three categories of surgeons. Ambroise Pare's contribution to the development of medicine

Topic 6. Medicine of Kievan Rus. Medicine in the period of fragmentation of and the development of feudal relations. Ukraine and the problem of the Northern Renaissance

pr.tr.11 "Medicine of Kievan Rus. Medicine in the period of fragmentation of and the development of feudal relations." (full-time course)

Written sources for the study of medicine of Kievan Rus. Treatment in Kievan Rus before the adoption of Christianity. Monastic medicine in Kievan Rus. Activities of monks. Secular medicine in Kievan Rus. Sanitation, epidemics and their control in Kievan Rus. Written sources for the study of medicine of the Russian state of the XV-XVII centuries. Medicine and medical business in the Western Ukrainian lands in the XIII-XVII centuries. Epidemics and the fight against them in the Russian state until the nineteenth century. The first pharmacies and pharmacy order in the Moscow state. Training of doctors in the Moscow state in the XV-XVII centuries. Features of medical business in the Russian state in the XVIII century. Georgy Drohobych (Kotermak) - his life and work. Features of training of doctors in the Russian state in the XVIII century. Nestor Maksymovych - Ambodik and his contribution to national medicine.

pr.tr.12 "Ukraine and the problem of the Northern Renaissance" (full-time course)

Danilo Samoilovich Samoilovich and his contribution to domestic medicine. Dissemination and establishment of Renaissance and humanistic ideas in Ukraine. Medical education in Ukraine. Zamaiska Academy. The emergence of fraternities (Lviv, Kyiv, 1615, Lutsk, 1617). Cultural and educational activities of fraternities. Printing business. Fraternal schools. Public medicine. Monastic and fraternal hospitals. Craft (shop) medicine.

Topic 7. Medical and biological direction in modern medicine

pr.tr.13 "Medico-biological direction in modern medicine (XVIII century)." (full-time course)

Introduction of clinical teaching in Western Europe. Thermometers and introduction of thermometry in clinical practice. Percussion: direct and indirect. Auscultation: direct (direct) and indirect. The development of medical education in the Russian state in the XIX century. - early twentieth century. The development of internal medicine in Russia in the early nineteenth century. The founder of the scientific therapeutic school is Serhiy Petrovich Botkin. Vasyl Parmenovych Obraztsov - his life and work. Zemsky medicine in the Russian Empire. Stepan Fomych Hotovytsky: life and activity. Contribution to the development of medicine by Neil Filarovich Filatov. The role of Philip Pinel in the development of medicine. Sergei Sergeevich Korsakov - life and work. The doctrine of blood transfusion. Modern surgery in Western Europe. Activity of Efrem Osipovich Mukhin. Contribution to the development of medicine of Nikolai Ivanovich Pirogov. Discovery and introduction of anesthesia. Life and activity of Mykola Vasyliovych Sklifosovsky. Development of obstetrics in Western Europe of modern times.

pr.tr.14 "Medico-biological direction in modern medicine (XIX century)" (full-time course)

Obstetrics and gynecology in Russia in the XIX century. The emergence of demographic statistics. Formation of professional hygiene. The development of public hygiene in Western Europe in the eighteenth and nineteenth centuries. Formation of experimental hygiene in Western Europe. Experimental hygiene in the Russian Empire in the XIX century. Medicine and health care of Sumy region. Ivan Andreevich Politics - life and activity. Life of Hryhoriy Ivanovych Bazylevych. Natives of Sumy region: Denis Vasyliovych Ponyrka, Petro Semenovych Simontovsky, Hryhoriy Fedorovych Sobolevsky, Andriy Ivanovych Fedorovsky - life and activity. The role of people from Sumy region in the development of medical and biological direction in the Russian state in the XIX century. The role of people from Sumy region in the Russian state in the XIX century. Alexander Bobrov (1850 - 1904), Pavel Parfenovich Zabolotsky-Desyatovsky (1804 - 1872), Pavel Andreevich Naranovich (1801 - 1874) and etc. Medicine in creativity and life AP Chekhov

Topic 8. Modern medicine: clinical disciplines, hygiene and social medicine

pr.tr.15 "Modern medicine: clinical disciplines" (full-time course)

Introduction of clinical teaching in Western Europe. Thermometers and introduction of thermometry in clinical practice. Percussion: direct and indirect. Auscultation: direct (direct) and indirect. The development of medical education in the Russian state in the XIX century. - early twentieth century. The development of internal medicine in Russia in the early nineteenth century. The founder of the scientific therapeutic school is Serhiy Petrovich Botkin. Vasyl Parmenovych Obraztsov - his life and work. Zemsky medicine in the Russian Empire. Stepan Fomych Hotovytsky: life and activity. Contribution to the development of medicine by Neil Filarovich Filatov. The role of Philip Pinel in the development of medicine. Sergei Sergeevich Korsakov - life and work. The doctrine of blood transfusion. Modern surgery in Western Europe. Activity of Efrem Osipovich Mukhin. Contribution to the development of medicine of Nikolai Ivanovich Pirogov. Discovery and introduction of anesthesia. Life and activity of Mykola Vasyliovych Sklifosovsky. Development of obstetrics in Western Europe of modern times. Obstetrics and gynecology in Russia in the XIX century. The emergence of demographic statistics.

pr.tr.16 "Modern medicine: hygiene and social medicine" (full-time course)

Formation of professional hygiene. The development of public hygiene in Western Europe in the eighteenth and nineteenth centuries. Formation of experimental hygiene in Western Europe. Experimental hygiene in the Russian Empire in the XIX century. Medicine and health care of Sumy region. Ivan Andreevich Politics - life and activity. Life of Hryhoriy Ivanovych Bazylevych. Natives of Sumy region: Denis Vasyliovych Ponyrka, Petro Semenovych Simontovsky, Hryhoriy Fedorovych Sobolevsky, Andriy Ivanovych Fedorovsky - life and activity. The role of people from Sumy region in the development of medical and biological direction in the Russian state in the XIX century. The role of people from Sumy region in the Russian state in the XIX century. The role of people from Sumy region in the Russian state in the XIX century. Alexander Bobrov (1850 - 1904), Pavel Parfenovich Zabolotsky-Desyatovsky (1804 - 1872), Pavel Andreevich Naranovich (1801 - 1874) and etc. Medicine in creativity and life AP Chekhov

Topic 9. History of industrial medicine and blood service

pr.tr.17 "History of industrial medicine and blood service" (full-time course)

Features of industrial medicine. Sources of industrial medicine. Development of industrial medicine and blood service. History of the blood service of Ukraine. Prospects for the development of industrial medicine and blood service.

pr.tr.18 "Final modular control" (full-time course) Final modular control

7.2 Learning activities

LA1	Participation in discussion (group and pair)
LA2	Preparation and presentation of the report
LA3	Preparation for current and final control
LA4	Preparation for practical classes
LA5	Preparation of multimedia presentations
LA6	Self-study
LA7	Work with textbooks and relevant information sources

8. Teaching methods

Course involves learning through:

TM1	Case-study
TM2	Educational discussion / debate
TM3	Think-pair-share
TM4	Business games
TM5	Practice-oriented learning
TM6	Brainstorming

The training combines group classes, individual tasks. Case studies, business games, discussions, practical demonstrations, and presentations are mandatory learning activities.

Mastering skills such as ability to abstract thinking, analysis and synthesis; ability to learn, master modern knowledge and apply it in practical situations; knowledge and understanding of the subject area and understanding of professional activity; ability to make informed decisions; work in a team; interpersonal skills; ability to use information and communication technologies; determination and persistence in the tasks and responsibilities.

9. Methods and criteria for assessment

9.1. Assessment criteria

Definition	National scale	Rating scale
Outstanding performance without errors	5 (Excellent)	$170 \le RD \le 200$

Above the average standard but with minor errors	4 (Good)	$140 \le RD < 169$
Fair but with significant shortcomings	3 (Satisfactory)	$120 \le RD < 139$
Fail – some more work required before the credit can be awarded	2 (Fail)	$0 \le \text{RD} < 119$

9.2 Formative assessment

FA1	Peer assessment
FA2	Discussion and self-correction of the work done by students
FA3	Interviews and oral comments of the teacher on his results
FA4	Verification and evaluation of written assignments

9.3 Summative assessment

SA1	Classroom work (surveys and testing)
SA2	Execution of a practical case (preparation, presentation, defense)
SA3	Work on online classes
SA4	Compilation of complex written modular control

Form of assessment:

3 semester		200 scores
SA1. Classre	oom work (surveys and testing)	80
	16x5	80
SA2. Execution of a practical case (preparation, presentation, defense)		40
		40
SA4. Compilation of complex written modular control		80
		80

Form of assessment (special cases):

3 semester		200 scores
SA2. Execut	ion of a practical case (preparation, presentation, defense)	40
		40
SA3. Work on online classes		80
	16x5	80
SA4. Compilation of complex written modular control		80
		80

10. Learning resources

10.1 Material and technical support

MTS1	Multimedia, video and audio, projection equipment (video cameras, projectors, screens, smart boards, etc.)
MTS2	Library funds
MTS3	Information and communication systems

10.2 Information and methodical support

Essential Reading	
1	Stupak, F. Ya. History of medicine: textbook / F. Ya. Stupak. — Kyiv: Kniga-plus, 2020.
2	Історія служби крові: монографія / В.В. Любчак, В.П. Любчак, А.С. Тимченко, Л.М. Хоменко Суми: Сумський державний університет, 2020 336 с.
3	Hero van Urk. A history of medicine. From prehistory to 2020. 2020. USA: Barnes Nobel. 258 p.
Supplemental Reading	
4	M. Jackson. The History of Medicine. A Beginner's Guide. USA: Oneworld, 2014
5	Armine S. Aslanyan. History of medicine, Manual / -Yerevan-YSMU, 2018, 175 pages
6	Forrester R. The History of Medicine. 2015. 36 p
7	Любчак В.В., Плакса В.М., Малігон О.І. та ін. Журнал «Врачебное дело»: у джерел 100-річної історії української медичної публіцистики // Врачебное дело 2018 №7-8 с. 164-169.
Web-based and electronic resources	
6	You-tube chanel about history of medicine. URL: https://www.youtube.com/c/LOONYMAN/about