

Federal State Autonomous Educational Institution of Higher Education
«Peoples' Friendship University of Russia»

Medical Institute

Recommended MCSD

SYLLABUS
(STUDY GUIDE)

Subject

History of Medicine

Recommended for the direction of training (specialty)

31.05.01 General Medicine

Program (profile, specialization)

General Medicine

1. Subject Goal and tasks:

Goal – To study history, appropriateness and logic development of healing, medicine, medical activities and Public Health from Early being of mankind till our days.

Main tasks:

- To introduce students into the History of Medicine and Public Health from Early being of Mankind till present times.
- To show achievements and common appropriateness of origin and development of medical knowledge in different civilizations, in context of the World History.
- To demonstrate an interaction of national and international factors in development of medical knowledge and practice in different parts of the World;
- To acquaint students with the key advances and discoveries in different fields of Medicine, Surgery, Public Health, and their pioneers;
- To show the peculiarities of Medical ethics in different civilizations in different times;
- To broaden students' outlook in Medical History and ethics, to increase their cultural level.

2. The subject 'History of Medicine' in Medical curriculum

(in the Federal State Educational Standard of Higher Education – FSES HE 3++)

The subject '**History of Medicine**' is a compulsory course taught within the **Block 1** of *Humanitarian, Social and Economic Subjects* of Higher Medical Education.

Students doing '**General Medicine**' study the subject 'History of Medicine' at **the fourth semester** (at the 2nd academic year).

Preceding and following subjects

- Before studying 'History of Medicine' students are expected to master preceding subjects: World History, Philosophy, Latin and basic Medical-biological subjects – Anatomy, Biology and Genetics, Histology and Embryology, Microbiology, Physiology.
- Learning 'History of Medicine' provides common theoretical background for further training in Professional Subjects, such as: Internal Diseases, Surgery, Obstetrics and Gynaecology, Traumatology, Epidemiology, etc. (Table 1)

Table 1. **Preceding and following subjects connected with creation of Universal and General Professional Competences**

<i>№</i>	<i>Code and name of competences</i>	<i>Preceding subjects</i>	<i>Following subjects</i>
Universal Competence Category (UC)			
1	UC-1 – UC-1. Being able to implement critical analysis of problem situations based on systems approach, develop an action strategy	Philosophy, Main Bio-medical sciences (Anatomy, Biology and Genetics, Histology and Embryology, Microbiology, Physiology), Latin	Every following clinical subject: Internal Diseases, Surgery, Obstetrics and Gynaecology, Traumatology, Infectious diseases and Epidemiology, etc.
2	UC-5 – Being able to analyse and take into account cultural diversity in the process of intercultural communication	World History, National History, Philosophy, Latin	Every following clinical subject: Internal Diseases, Surgery, Obstetrics and Gynaecology, Traumatology, Infectious diseases and Epidemiology, etc.
General Professional Competences Category (GPC)			
	GPC-1 – Being able to implement moral and legal	Philosophy, Main Bio-medical sciences (Anatomy,	Every following clinical subject: Internal Diseases, Surgery,

	norms, ethical and deontological principals in professional activity	Biology and Genetics, Histology and Embryology, Microbiology, Physiology), Latin	Obstetrics and Gynaecology, Traumatology, Infectious diseases and Epidemiology, etc.
Professional Competences			
	NO		

3. **Learning Outcomes** (Requirements to results of learning the subject)

The course “History of Medicine’ is expected to contribute to the following **Competences** formation (under the Federal Educational Standard of Higher Education 3++) (Table 2):

Table 2. **Competences for the subject ‘History of Medicine’**

Competence Code	Competence Name	Competence Achievement Indicator Code and Name
UC-1	Being able to implement critical analysis of problem situations based on systems approach, develop an action strategy	UC-1.2. Assessing in a critical way the reliability of information sources, working with contradictory information from different sources
UC-5	Being able to analyse and take into account cultural diversity in the process of intercultural communication	UC-5.1. Understanding communication rules, traditions and norms of foreign countries
GPC-1	Being able to implement moral and legal norms, ethical and deontological principals in professional activity	GPC-1.2. Being able to present professional information in the process of intercultural interaction observing the principles of ethics and deontology

Study ‘History of Medicine’ is aimed to create the following abilities:

To know:

1. Main stages and appropriateness of the historical development of healing, medicine and medical activity in different countries since Early being of Mankind to our days;
2. Achievements of the great civilizations in different fields of Medicine, Dentistry, Nursing, Public Health, in close connection with their history and culture;
3. Contribution of outstanding physicians and scientists in medical science and practice, and Public Health;
4. Achievements and priorities of the Russian Medicine;
5. Peculiarities of medical ethics in different civilizations in different times.

To be able:

1. To analyse historical data on historical development of healing, Medicine, Dentistry, Nursing and Public Health from their sources up to our days.
2. To discuss on timely topics connected with scientific development of Medicine, Nursing and Public Health.
3. To use acquired knowledge in the History of Medicine, medical ethics and education in everyday professional practice and communication with colleagues and patients.
4. To understand importance of national and international factors in development of medical knowledge and practice in different civilizations;
5. To follow honourably humanistic ideas and spiritual values in their professional activity.

4. **Course Workload and kinds of study** (Объем дисциплины и виды учебной работы)

The course ‘History of Medicine’ total workload for the students doing ‘Medicine’ is equal to **3** credit units (**108** study hours, including lectures, seminars, and out-class work) (Table 3).

Table 3. **Kinds of study and study hours**

	Kinds of work	Study hours	Hours incl.	Semester IV
1.	Academic hours (total)	72		72
	<i>Including:</i>			
1.1.	Lectures (L)		36	36
1.2.	Seminars (S)		36	36
2.	Out-class work (individual learning)	36		36
	<i>Including</i>			
2.1.	Course paper (on the History of Medicine)		18	18
2.2.	Other kinds of out-class work (individual learning)		18	18
3.	Total workload	108		108
	Credit units	3		3

5. Contents of the ‘History of Medicine’ course

5.1. Modules and topics

Syllabus of subject “History of Medicine” includes **8** modules divided into **14** topics (Table 4).

Table 4. **Contents of modules and topics of the ‘History of Medicine’ course**

№	Module	Topic №	Contents of Modules and Topics
Module I	Introduction. Early kinds of healing	Topic 1	1.1. Formation of human society, and early kinds of healing 1.2. Healing during the maturity of prehistoric society 1.3. Healing during the decline of prehistoric society 1.4. Folk medicine
Module II	Healing and Medicine in Ancient East civilizations	Topic 2	2.1. Common characteristics of healing and Medicine in Ancient civilizations 2.2. Healing and Medicine in Ancient Mesopotamia (Sumer, Babylonia, Assyria) 2.3. Healing and Medicine in Ancient Egypt
		Topic 3	3.1. Healing and Medicine in Ancient India 3.2. Healing and Medicine in Ancient China
Module III	Healing and Medicine in Ancient Mediterranean countries	Topic 4	4.1. Healing and Medicine in Ancient Greece
		Topic 5	5.1. Healing and Medicine in Ancient Rome
Module IV	Medieval Medicine (V–XV centuries)	Topic 6	6.1. Medicine in the Byzantine Empire 6.2. Medicine in the Caliphates (VII–X centuries) 6.3. Medicine in Middle and Central Asia (X–XV centuries)
		Topic 7	7.1. Medicine in Medieval Western Europe (V–XV centuries) 7.2. Medicine in Medieval Rus (IX–XV centuries)
Module V	Medicine in Early Modern Time (XV – early XVII century)	Topic 8	8.1. Renaissance Medicine in Western Europe
		Topic 9	9.1. Medicine in the Americas before and after the conquest (Mayas, Aztecs, Incas) 9.2. Medicine in the Russia State (XV–XVII centuries)

Module VI	Bio-medical Sciences in Modern Time (mid XVII–XIX century)	Topic 10	10.1 The greatest discoveries in natural sciences 10.2. Biology and Genetics 10.3. Anatomy 10.4. Histology and Embryology 10.5. Pathology 10.6. Microbiology
		Topic 11	11.1. Physiology and Experimental Medicine
Module VII	Clinical Medicine in Modern Time (mid XVII–XIX century)	Topic 12	12.1. Internal Medicine. The first physical methods for clinical examination. Medical education 12.2. The Russian medicine and education in XVIII–XIX centuries 12.3. Infectious diseases and Epidemics
		Topic 13	13.1. Problems and progress of Surgery in Modern Time. 13.2. History of Nursing
Module VIII	Medicine and Public Health in the XX century. History of Medical Ethics	Topic 14	14.1. History of Nobel Prizes. The Nobel prizes in Physiology or Medicine 14.2. Medicine and Public Health in Russia in the late XIX – XX century 14.3. International co-operation in Public Health and Medicine (International Red Cross; World Health Organization; World Physicians against the Nuclear War)

5.2. Modules of the ‘History of Medicine’ course and distribution of study hours

(Разделы дисциплины и виды занятий)

Table 5. Modules and distribution of study hours

Module №	Modules	L hours	S hours	Out-class hours	Total study hours
I	Introduction. Early kinds of healing	2	2	1	5
II	Healing and Medicine in Ancient East civilizations (Ancient Mesopotamia, Ancient Egypt, Ancient India, Ancient China)	4	4	2	10
III	Healing and Medicine in Ancient Mediterranean countries (Ancient Greece, Ancient Rome)	4	4	2	10
IV	Medieval Medicine (V–XV centuries) (Byzantine Empire, Medieval Rus, the Caliphates, Central Asia, Medieval Western Europe)	4	4	2	10
V	Medicine in Early Modern Time (XV–XVII centuries): (Renaissance in Western Europe, the Americas before and after the conquest, the Russian State)	4	4	2	10
VI	Bio-medical Sciences in Modern Time (mid XVII–XIX century) (Biology, Anatomy, Histology, Pathology, Microbiology, Physiology and Experimental Medicine)	6	6	2	14
VII	Clinical Medicine in Modern Time (mid XVII–XIX century) (Internal Medicine, Infectious diseases, Surgery, Nursing, the Russian medicine and education)	6	6	2	14
VIII	Medicine and Public Health in the XX century History of Medical Ethics	6	6	3	15
	<i>Course paper</i>	-	-	20	20
	Total:	36	36	36	108

6. Lectures

According to the curriculum for program ‘**Medicine**’, there are **2** lecture hours per week for the ‘History of Medicine’ (total **36** hours per semester) (Table 6).

Table 6. **Lectures on the History of Medicine**

№	Lectures	Hours
1	Introduction: History, Culture, Medicine. Division into periods and chronology of the History of Medicine. Sources. Medicine and Art. Early types of healing. Folk healing	2
2	Medicine in the Ancient World (Ancient Mesopotamia, Ancient Egypt)	2
3	Medicine in the Ancient World (Ancient India, Ancient China)	2
4	Medicine in the Ancient World (Ancient Greece)	2
5	Medicine in the Ancient World (Ancient Rome)	2
6	Medicine in Early (V–X centuries) and Classical (XI–XV centuries) Middle Ages (Byzantine Empire, Medieval Rus, Arabic Medicine)	2
7	Medicine in Early (V–X centuries) and Classical (XI–XV centuries) Middle Ages (Medieval Western Europe)	2
8	Medicine in Early Modern Time (XV–XVII centuries): (Renaissance in Europe, the Russian state)	2
9	Medicine in Early Modern Time (XV–XVII centuries): (the Americas before and after conquest)	2
10	Bio-medical Sciences in Modern Time (Biology, Anatomy, Histology, Pathology, Microbiology)	2
11	Biological Sciences and Medicine in Modern Time (Physiology and Experimental Medicine)	2
12	Clinical Medicine in Modern Time (Internal Medicine)	2
13	Clinical Medicine in Modern Time (Surgery, Nursing)	2
14, 15	Medicine in the XX century: Public Health in Russia, Nobel prizes. Main achievements in Bio-medical and clinical sciences.	4
16	International cooperation in Medicine and Public Health.	2
17, 18	History of Medical ethics	4
	Total:	36

7. Seminars

According to the curriculum for program ‘**Medicine**’, there are **2** seminar hours per week for the History of Medicine (total **36** hours per semester) (Table 7).

Table 7. **Seminars on the History of Medicine for students doing ‘Medicine’**

Module №	Modules	Seminar №	Contents of seminars	Hours
I	Early kinds of healing	1	1.1. Formation of human society and early kinds of healing 1.2. Healing during the maturity of prehistoric society 1.3. Healing during the decline of prehistoric society. 1.4. Folk medicine	2

II	Medicine in Ancient East civilizations	2, 3	2.1. Common characteristics of healing and Medicine in Ancient civilizations 2.2. Healing and Medicine in Ancient Mesopotamia (Sumer, Babylonia, Assyria) 2.3. Healing and Medicine in Ancient Egypt 3.1. Healing and Medicine in Ancient India 3.2. Healing and Medicine in Ancient China	4
III	Medicine in Ancient Mediterranean countries	4, 5	4.1. Healing and Medicine in Ancient Greece 5.1. Healing and Medicine in Ancient Rome	4
IV	Medieval Medicine (V–XV centuries)	6, 7	6.1. Medicine in the Byzantine Empire 6.2. Medicine in the Caliphates (VII–X centuries) 6.3. Medicine in Middle and Central Asia (X–XV centuries) 7.1. Medicine in Medieval Western Europe (V–XV centuries) 7.2. Medicine in Medieval Rus (IX–XV centuries)	4
V	Medicine in Early Modern Time (XV – early XVII century)	8, 9	8.1. Renaissance Medicine in Western Europe 9.1. Medicine in the Americas before and after the conquest (Mayas, Aztecs, Incas) 9.2. Medicine in the Russian State (XV–XVII centuries)	4
VI	Bio-medical sciences in Modern Time (mid XVII–XIX century)	10, 11	10.1. The greatest discoveries in natural sciences 10.2. Biology and Genetics 10.3. Anatomy 10.4. Histology and Embryology 10.5. Pathology 10.6. Microbiology 11.1. Physiology and Experimental Medicine	4
VII	Clinical Medicine in Modern Time (mid XVII–XIX century)	12, 13, 14, 15	12.1. Internal Medicine. The first physical methods and instruments for clinical examination. Medical education. Infectious diseases and Epidemics 13.1. The Russian medicine and education in XVIII–early XIX centuries 15.3. 14.1. Problems and progress of Surgery. 14.2. History of Nursing. 15.1. The Russian medicine and education in XIX century.	8
VIII	Medicine and Public Health in the XX century	16, 17	16.1. History of Nobel Prizes. The Nobel prizes in Physiology or Medicine 16.2. Medicine and Public Health in Russia in the late XIX – early XX century. 17.1. International co-operation in Public Health and Medicine (International Red Cross; World Health Organization; World Physicians against the Nuclear War). 17.1. Achievements and perspectives in Medicine, Surgery and Public Health in XXI century.	4
		18	18.1. Zachyot	2
			Total:	36

8. Material and technical providing of the teaching process

- In 2015 a special ‘**History of Medicine seminar-room**’ had been organized at the main building of the Medical Institute, PFUR. Seminar-room is equipped with all necessary means (computer, projector, Internet) to provide student’s presentations and test-control during seminars.
- The wall-expositions are devoted to different periods of the World History of Medicine.
- Show-cases hold literature recommended for students, books on the history of PFUR, and other displays on the World History of Medicine.
- A special stand ‘*the History of Medicine course*’ provides students with all necessary information on teaching process.
- All necessary information for students is available at the University TUIS (Телекоммуникационная учебно-информационная система РУДН) – the Telecommunication System for Education and Information (TSEI).

9. **Information support of the subject**

(Databases, references and search systems):

Table 8. **Databases and search systems**

№	Databases and search systems	Site address
1	Electronic Library System (ELS) of the RUDN University	http://lib.rudn.ru/MegaPro/Web
2	Telecommunication System for Education and Information (TSEI) – ТУИС РУДН	http://esystem.pfur.ru
3	«University library online»	http://www.biblioclub.ru
4	Wellcome Library	https://wellcomecollection.org/
5	Electronic library of the MSMDU Department for the History of Medicine	http://www.historymed.ru
6	Electronic library of the Russian State Library (RSL – РГБ)	http://www.rsl.ru/
7	Electronic library – Ihtika	http://ihtika.net/
8	Electronic library – Gumer	http://www.gumer.info/
9	Electronic library of manuals	http://studentam.net/
10	European Electronic library Europeana	http://www.europeana.eu/portal/
11	Other information resources	

10. **Literature and methodical support of the subject**

10.1. Literature

a) Basic text-books and manuals:

1. *Сорокина Т.С. История медицины: в 2-х т. – Учебник для студ. высш. мед. учеб. заведений. – 14-е изд., стереотип. (гриф Минобразования РФ). – М.: Издательский центр "Академия", 2021. – 288 и 352 с. (in Russian).*
2. *Сорокина Т.С. Учебно-методический комплекс дисциплины «История медицины» по специальности 31.05.01. «Лечебное дело». – М.: РУДН, 2017. – 80 с. (in Russian).*

б) Further readings:

1. **Companion Encyclopedia of the History of Medicine:** In 2 vol. / Edited by W.F.Bynum and Roy Porter. – London, 1993. – 778, 997 pp.
2. *Ellis, Harold. A History of Surgery.* London:Greenwich Medical Media Ltd; 2002. 264 p.
3. *Porter, Roy. The Greatest Benefit to Mankind: A medical history of humanity from Antiquity to the Present.* London: Fontana Press; 1999. 833 p.
4. *Rooney, Ann. The story of Medicine: From early healing to the miracles of modern medicine.* London: Arcturus; 2011. 208 p.

5. *Sorokina T.S. Russian nursing in the Crimean War* // The Journal of the Royal Society of Physicians of London. — 1995. — Vol. 29. — No 1. — P. 57—63.
6. *Sorokina T.S. Nursing in the Russian-Turkish wars (1853–1856, 1877–1878)* // Proceedings: 38th International Congress on the History of Medicine. In three vol. — Vol. 2. — Ankara, 2004. — P. 1025–1028.
7. *Sorokina T.S. Zemstvo physician – a prototype of modern General Practitioner* // 40th International Congress on the History of Medicine. August 26-30, 2006. PROCEEDINGS. V. 1. – Budapest, 2006. – P. 215-218.
8. *Sorokina T.S. Hypoxia: from the first historical documents to prevention and treatment* // Journal “Analecta Historico Medica”. – Año VI. № 1. – 2008. – P. 179–190.
9. *Sorokina T.S. The Great Russian Surgeon Nikolay Ivanovich Pirogov (1810–1881)* (bicentenary of his Birthday) // Vesalius: Acta Internationalia Historiae Medicinae. – 2011. – Vol. XVII. – №1. – P. 10–15/
10. *Sorokina T.S. A Victory over the Plague in Moscow 1770–1772.* In: Vesalius: Acta Internationalia Historiae Medicinae. June, 2013. XIX (1): 11–18.
11. *Sorokina T. Eugeny Tareyev (1895-1986), a founding pioneer of Nephrology in Russia, and Europe.* Journal of Nephrology. November-December 2013; 26:22:60-62.
12. *Sorokina, Tatiana S. “The Great Silk Road” and the first Description of Hypoxia* // In: **Vesalius: Acta Internationalia Historiae Medicinae.** – Vol. XXII, No. 2 (Supp), December, 2016: 53–58.
13. *Ermolayev A.V., Sorokina, T.S. On the History of discovery of bacteriophages* // **History of Medicine.** 2018. №1. C. 78-84

10.2. Electronic resources

Table 9. Manual “History of Medicine” by Professor T. S. Sorokina

№	Site address
1	Publishing House ‘Academia’ – www.academia-moscow.ru
2	http://www.bibliotekar.ru/423/
3	http://www.hameleon.su/2008_023_6_med.shtml
4	http://www.glazikplus.info/index.php?page=4&ARTICLE=234&LIST=1
5	http://www.apteka.uz/books/book924/text40794
6	http://2012god.ru/medicina-v-drevnej-rusi-i-skifii/
7	Other sites and TV programs

Table 10. Video-Lectures delivered by Professor T. S. Sorokina

№	Site address
1	“Healing and Medicine in Ancient Greece” (TV ‘Kultura’, Academia) https://tvkultura.ru/anons/show/episode_id/160878/brand_id/20898/ https://tvkultura.ru/anons/show/episode_id/161224/brand_id/20898/
2	Medicine in Pre-Spanish America”: http://www.historymed.ru/encyclopedia/video_links/index.php?.ELEMENT_ID=2256 .
3	“Problems and achievements of Surgery in Modern Time”: http://www.historymed.ru/encyclopedia/video_links/index.php?.ELEMENT_ID=2257
4	TUIS RUDN, Dpt. for the History of Medicine

11. Guidelines for students: How to prepare a Course paper

Course thesis is a kind of individual written essay on chosen topic of Medical History, based on analysis of literature and databases on the topic. Every student has to design it in written form and prepare a slide-show for presentation the paper at seminar.

11.1. Main topics for Course paper

Module 1. Introduction

1. Medicine and Art (Medicine in painting, fine arts, literature).
2. History of Medicine and Public Health in your country (your region, town).

Module 2. Medicine in Ancient East civilizations

3. Medicine and culture in Ancient Mesopotamia .
4. Medicine and culture in Ancient Egypt.
5. Medicine and culture in Ancient India.
6. Traditional Ayurvedic Medicine: past and future.
7. Traditional Chinese Medicine: past and future.
8. Folk healing and Traditional Medicine: past, present, future.
9. Medical ethics in Ancient World.

Module 3. Medicine in Ancient Mediterranean countries

10. Medicine in Ancient Greece.
11. Hippocrates and “*Corpus Hippocraticum*”.
12. Medicine in Ancient Rome.
13. State and Military Medicine in Ancient Rome.
14. Galen (129–204) and galenism in the light of medieval scholastics.

Module 4. Medieval Medicine (V–XV centuries)

15. Medieval Arabic culture and Medicine.
16. Ibn Sina (980–1037) and his “*Canon of Medicine*”.
17. Traditional Tibetan Medicine: sources and development.
18. Medicine in Medieval Europe.
19. Universities of the Medieval Europe.
20. the ‘Black Death’ (1346–1348) and struggle against plague.
21. Novgorod excavations on Hygiene and Medicine in Ancient Novgorod.
22. Russian Tsars: their illnesses and treatment.

Module 5. Medicine in Early Modern Time (XV – early XVII century)

23. Andreas Vesalius (1514–1564) – a founder of modern scientific Anatomy.
24. William Harvey (1578–1657) – a founder of scientific Physiology.
25. Paracelsus (1493–1541) – a physician, alchemist and innovator.
26. Girolamo Fracastoro (1478–1533) and his teaching on contagious diseases.
27. Ambroise Pare (1510–1590) and surgery in Europe during Renaissance.
28. Culture and Medicine in Pre-Spanish America.
29. Medicine and Medical education in Russia in Modern Time.
30. Apothecary board (early XVII century) – the first organ of medical regulation in Russia.
31. Development of medicine in Russia under Peter the Great.

Module 6. Bio-medical sciences in Modern Time (mid XVII–XIX century)

32. The Greatest Discoveries in Natural Sciences in XVIII–XIX centuries.
33. Frederik Ruysch (1638–1731) in the History of Anatomy.
34. Development of Histology and Embryology.
35. Rudolf Virchow (1821–1902) – a founder of Pathological Anatomy.
36. Victor V. Pashutin (1845–1901) – a founder of Pathological Physiology in Russia.
37. Edward Jenner (1749–1823) and the History of vaccination.
38. Louis Pasteur (1822–1895) – a founder of scientific Microbiology and Immunology.
39. Theory of immunity: Ilya I. Metchnikov (1845–1916), Paul Ehrlich (1854–1915).
40. History of creation and development of Bacteriology. Robert Koch (1843–1910).
41. History of creation and development of Virology.
42. From Ivan M. Setchenov (1829–1905) to Ivan P. Pavlov (1849–1936).
43. Ivan P. Pavlov (1849–1936) – an outstanding physiologist of the XX century.

Module 7. Clinical Medicine in Modern Time (mid XVII–XIX century)

44. History of the Moscow University and development of higher medical education in Russia.
45. The first methods of clinical examination: percussion and auscultation.
46. History of struggle against plague.
47. Danilo S. Samoylovich (1742–1805) – an outstanding epidemiologist of the XVIII century.
48. History of struggle against small pox.
49. History of narcosis.
50. Joseph Lister (1827–1912) – a founder of antiseptics.
51. Nicolay I. Pirogov – the founder of Topographical Anatomy and Military-field Syrgery.
52. Nicolay I. Pirogov – the greatest surgeon of his time.
53. The Russian priorities in the Crimean War 1854–1855.
54. History of Nursing (charity).

Module 8. Medicine and Public Health in the XX century

55. Development of Public Health and Social Hygiene in Russia (Zemstvo Medicine, etc.).
56. Formation and development of Experimental Hygiene.
57. Nobel awards in Physiology and Medicine.
58. Methods of diagnostics and treatment: history of creation and introduction.
59. Life-story and achievements of an outstanding scientist.
60. History of Higher Medical Education (institution, university, department, personality).
61. History of a famous clinic (hospital).
62. History of Dentistry and Dental sciences.
63. History of creation of dental instruments, devices and apparatus.
64. History of organ transplantation: kidneys, liver, heart, and other organs.
65. Ethical problems of organ and tissue transplantation.
66. Infectious disease of the XX century.
67. International cooperation in the field of Public Health (the Red Cross, WHO, etc.).
68. Medical ethics and deontology in different countries and civilizations.

Common topics

69. History of a great medical discovery (or branches of Medicine, methods of diagnostics and treatment, etc.).
70. Heroism of medical profession.
71. History of one of the departments of Medical Faculty/Institute PRUR.
72. Contribution of the PFUR Medical faculty/Institute and its scientists in different branches of Medicine.
73. History of creation of medical (or surgical) instruments, devices and apparatus.
74. Any other topic on the History of Medicine and its different branches (Internal Medicine, Surgery, Dentistry, Pharmacy, etc.) – of student's own choice.

11.2. Guidelines: Course paper format and design

- A manuscript should be written in English, using correct diction, syntax, and grammar.
- All pages must be typed and double-spaced, using 12-point Times New Roman font.
- All pages, including figures and tables, should be numerated in sequence.
- Manuscript pages must have margins of 3 cm – on the right side, and of 2.0 cm – on other three sides.
- The manuscript should consist of: (1) title page; (2) contents, (3) introduction with description of main aim of the research and modern status of the problem, (4) main text of the research, divided into few sections, and accompanied by endnotes and footnotes, (5) conclusion – summary of the research, (6) references – a list of literature and other sources of information (including Internet), (7) as well as illustrations and tables.
- The first page of the manuscript – title page – must include: (1) names of the University, Institute, and Department for the History of Medicine; (2) topic title; (3) student's name, (4) his/her country, (5) group number; (6) teacher's name and titles; (7) date of presentation.

11.3. Course paper defence

- Every student presents a Course paper: (1) in written form, and (2) orally at seminar on the same topic.
- Presentation may be accompanied by a slide-show.
- A student should deliver the topic in his/her own words and answer all the questions.

12. Funds of Evaluation Systems of knowledge assessment

12.1. Evaluation Systems (ES)

There are different approaches to grading and evaluation of student's knowledge across European educational systems. In the past years, European institutions use three main estimation systems:

- (1) Point Rating System (PRS) – 100%,
- (2) European Credit Transfer and Accumulation System (ECTS),
- (3) National scales (in Russia – 1–5 marks) (Table 11).

Table 11. Main Evaluation Systems grade scales

ECTS	F	Fx	E	D	C	B	A
National scale	2	2+	3	3+	4	5	5+
Point Rating System (%)	0–30	31–50	51–60	61–68	69–85	86–94	95–100

Zachyot (Passed) = 51–100 points

Point Rating System (PRS) for knowledge evaluation is an *accumulating* one.

Points for every kind of study are summarized during semester, putting together maximum 100 points (Table 12).

Table 12. Point Rating System (PRS) grading scale for 'History of Medicine' (Program "General Medicine")

№	Kinds of study	Numbers	Points for one	Maximum mark
1	Lectures (L)	18	0,5	9
2	Seminars (S) – Modules on main topics	9	1	9
3	Seminars (S) – discussion	16	0–2	32
4	Course paper (CP)	<i>CP text</i>	1	0–5
5		<i>CP presentation</i>	1	0–20
6		<i>PowerPoint-slide-show of CP</i>	1	0–5
7	Test-control №1	1	0–10	10
8	Test-control №2 (zachyot)	1	0–10	10
	TOTAL			100
	Passed – Zachyot			51 and more

12.2. Funds of Evaluation Means (FEM)

According to the Federal State Educational Standard of Higher Education (FSSES HE), there are three levels of the student's knowledge evaluation:

- Current control of study (Tables 13, 14),
- Intermediate attestation (interim assessment)
- Final attestation (zachyot).

Table 13. **Passport of Point Rating System for the subject ‘History of Medicine’**
(Program ‘Medicine’, 18 weeks, 3 credit units)

CC	Module	Topic	L	S (dispute)	S (discussion)	Test	Course paper*	Points	Marks
UC-1, 5, GPC-1	Module I	1. Introduction. Early being of Mankind	0,5	0,5	2			3	3
UC-1, 5, GPC-1	Module II	2. Mesopotamia + Egypt	0,5	0,5	2			3	6
		3. Ancient India + China	0,5	0,5	2			3	
UC-1, 5, GPC-1	Module III	4 Ancient Greece	0,5	0,5	2			3	6
		5 Ancient Rome	0,5	0,5	2			3	
UC-1, 5, GPC-1	Module IV	6. Middle ages – East	0,5	0,5	2			3	6
		7. Middle ages – West	0,5	0,5	2			3	
	<i>Test 1</i>					10		10	10
UC-1, 5, GPC-1	Module V	8. Renaissance	0,5	0,5	2			3	6
		9. Americas+Medieval Rus	0,5	0,5	2			3	
UC-1, 5, GPC-1	Module VI	10. Med-Bio (4 h)	1	1	2			4	7
		11. Med-Bio – Physiology	0,5	0,5	2			3	
UC-1, 5, GPC-1	Module VII	12. Internal Medicine (4 h)	1	1	4			6	12
		13. Surgery (4 h.)	1	1	4			6	
UC-1, 5, GPC-1	Module VIII	14. The XX century (4 h.)	1	1	2			4	4
	<i>Test 2</i>					10		10	10
Course paper									30
TOTAL: 100 points			9	9	32	20	30	100	100

Table 14. **Fund of Evaluating Means (FEM) for the ‘History of Medicine’ course**

№	Evaluation means	Definition	Methodical providing
<i>Class work</i>			
1	Discussions and talks	Discussions on the topic of seminar	Questions on every topic
2	Tests	Number of questions and answers	Questions and answers for training on every topic
3	Presentations of a Course paper	Means to check abilities for preparing a scientific paper on the History on Medicine, and its public presentation	A list of main topics for Course paper
4	Zachyot	The final evaluation of study the subject during one semester	Point Rating System. Oral interview
<i>Out-class work (individual learning)</i>			
5	Course paper	A kind of individual written essay on any topic of Medical History, based on analysis of literature and databases on the topic. Every student has to design it in written form and prepare a slide-show for presentation at the seminar on the same topic	Methodical notes for preparing a course paper. A list of topics.

12.3. European Credit Transfer and Accumulation System (ECTS)

ECTS is a **credit system** designed to make it easier for students to move between European higher education institutions in different countries, by allowing national and local grading systems to be interchangeable. Since they are based on the learning achievements and workload of a course,

a student can transfer their ECTS credits from one university to another so they are added up to contribute to an individual's degree program or training.

The **ECTS grading system** is not replacing the local grading systems, but it's meant to be a supplement to local grades. Each institution makes its own decision on how to apply the ECTS grading scale to its system. The ECTS grade system shows how a student performed compared to the other students in the same class. Before the evaluation, the results are divided into two groups: pass and fail, and then assessed the performance of these two groups separately.

Those obtaining passing grades were divided into five subgroups: the best 10% are awarded an A grade, the next 25% a B grade, the following 30% a C, the following 25% a D and the final 10% an E. (Table 15)

Those who had not achieved a performance sufficient to allow a passing grade were divided into two subgroups: FX (Fail – some more work required before credit can be awarded) and F (Fail – considerable further work is required).

The use of words like "excellent" or "good" is not recommended as they do not fit with percentage based ranking of the ECTS Grade Transfer Scale.

Table 15. **The ECTS grading system**

Grade	% among passing students	Definition
A	10	Outstanding performance without errors
B	25	Above the average standard but with minor errors
C	30	Generally sound work with some errors
D	25	Fair but with significant shortcomings
E	10	Performance meets the minimum criteria
FX		Fail – some more work required before the credit can be awarded
F		Fail – considerable further work is required

The degree of differentiation shown in marks varies greatly from country to country and in many cases within a single country or institution.

In fact, the use of the ECTS scale by European institutions has been rather limited.

The program is compiled in accordance with the requirements of the FSES HE.

Developers:

Head of the Department for the History of Medicine,
Professor

Sorokina T.S.

Head of Department
Professor

Sorokina T.S.

**Head of the Program
Professor**

Radysh I.V.