

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
NORTHERN STATE MEDICAL UNIVERSITY
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A. K. Sherstennikova

June 16th 2021

SYLLABUS OF THE COURSE (MODULE)

Discipline **Philosophy**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1 / 2**

Form of the interim assessment **Pass/fail test**

Department **The Department of Humanities**

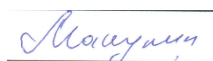
Discipline workload **72** (academic hours) / **2** (credits)

Approved at the department meeting:

Minutes No 11

June 9th 2021

Head of the department



A.V. Makulin

Author and compiler:

MAKULIN Artem Vladimirovich, Ph.D., docent,

Head of the Department of Humanities

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the Basic part of the curriculum (or to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects)

The discipline is related to prior subjects of the curriculum: **Bioethics**

The discipline is related to subsequent subjects of the curriculum: **no**

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive/diagnostic/organizational and administrative /research

2. Goal and tasks of the mastering of the discipline

Forming of necessary minimum of theoretical knowledge related to major philosophic questions, problems and concepts, which will lead to world outlook formation and will help students in their deeper understanding of professional knowledge.

Tasks of the course:

- develop the ability to navigate the complex philosophical problems;
- give an idea about the history of philosophy;
- explore current issues of philosophy.

2. Position of the course (module) within the structure of the educational program

The program is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

The program related to many academic disciplines, including such as "History", "Bioethics". In turn, the main provision of the philosophy is the basis for the formation of the individual specialist.

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
Universal competencies (UC)-№	
УК-1. Способен осуществлять критический анализ проблемных ситуации на основе системного подхода, вырабатывать стратегию действий	ИД-1.1 Осуществляет критический анализ информации на основе системного подхода ИД-1.2. Идентифицирует проблемные ситуации на основе критического анализа ИД-1.3. Разрабатывает стратегию действий для решения проблемных ситуаций на основе системного и междисциплинарного подходов
УК-5. Способен анализировать и учитывать разнообразие культур в процессе межкультурного взаимодействия	ИД-5.1. Соблюдает этические нормы и права человека ИД-5.2. Анализирует и учитывает в профессиональной деятельности этнокультурные, национальные и конфессиональные особенности
General professional competencies (GPC) -№	
ОПК-	-
Professional competencies *(PC)- №	
ПК-	-

*The list of professional competencies is based on the requirements of the professional standard "General medicine (district physician)", approved by the order of the Ministry of Labor and Social Protection of the Russian Federation of March 21, 2017 No. 293n

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 2 credits.

Type of the academic work	Total hours	Term
		2
Students' contact work with the teacher (total)	36	36
Including:		
Lectures (L)	12	12
Seminars (Sem.)	24	24
Practical classes (PC)		
Clinical practicals (CP)		
Laboratory-based practicals (LBP)		
Simulation-based practicals (SBP)		
Preparation for the examination (PE)		
Preparation for the credit (PC)		
Exam consultations (EC)		
Coursework (CW)		
Unsupervised work (UW) (total)	36	36
Examination control (EC)		
Total discipline workload	72/2	72

5. Course content:

5.1. Contents of the sections of the course

No	Name of the course section	Content of the section
1	2	3
I.	History of philosophy	
	Introduction to philosophy. Subject of philosophy. Appearance of philosophic knowledge	World outlook. Types of world outlook, dominated in various time periods: myth, religion, science. Outlook as system of value positions in understanding of World and human's place in it. Subject of philosophy and its meaning. Aims of philosophy. Needs of philosophy. Use of philosophy in medical practice. Importance of history of philosophy.
	Philosophy of the orient.	Specialty of Indian philosophy. Forming of Vedas. Classical philosophic schools in India: Charvaka- Lokayata, Jainism, Buddhism. Major terms and concepts in Indian philosophy. Rise of Chinese philosophy. Confucius and Daoism. Appearance of Buddhism in China. Medieval try to combine Confucius and Daoism. Philosophic school of neo- Confucius.
	Ancient Greek philosophy.	Natural philosophy. Pre-Socratic Philosophy. Sophistry. Socrates and the Socratic revolution in philosophy. The philosophy of Plato and Aristotle. Hellenistic philosophy and Roman philosophy
	MEDIEVAL PHILOSOPHY and RENAISSANCE PHILOSOPHY.	Medieval European philosophy as a system of Christian religious and philosophic tradition. Patristic. Augustine the Blessed. Scholastics and its major directions. Discussion about universals, variant of decisions: realism (Thomas Aquinas), nominalism (Roselyn), conceptualism (Abelard) Humanism, anthropocentrism, and pantheism in Renaissance philosophy. Its difference from Medieval one. Italian humanists (14-15 centuries). Nicolas Cusanus. Social and philosophic

		ideas of 16 th century. Reasons and ideas of Religious Reformation.
	Early modern philosophy. The philosophy of the enlightenment.	<p>Early modern philosophy.</p> <p>Metaphysical mechanics, materialism, idealism, rationalism, empirism, sensualism.</p> <p>Definition of TRUTH. Substance and its origin in classical metaphysics. Psychophysical problem; idealistic and materialistic decision.</p> <p>F. Bacon about pre justice of mind, methods of knowledge and practical tasks of science. Induction and Deduction. T. Hobbes: materialism in his study of human nature, concept of state and society. J. Locke: theory of knowledge and philosophic problems of liberalism.</p> <p>R. Descartes: rules of method, “I’m thinking means I’m existing”, possibility of true knowledge, reasons for mistakes. Pantheism and ethics of B. Spinoza.</p> <p>G. Leibniz and his study.</p> <p>J. Berkley and his subjective idealism. Agnosticism and D. Hume. His study of reasons and moral philosophy. I. Kant “What is it the Age of Enlightenment?”</p> <p>The Philosophy of the Enlightenment.</p>
	PHILOSOPHY at the end of the 18th – the first half of the 19th.	<p>Aims of critical philosophy. I. Kant and theory of knowledge. Transcendental ideas of clear knowledge as possible base for experience.</p> <p>Why it is possible to divide all objects into “objects of experience” and “objects out of experience”. Kant’s try to explain the possibility of moral behavior. Transcendental idea of freedom and autonomic will as the main moral principles.</p> <p>I. Kant’s idea of God is impossible to use for getting “positive” knowledge. Question of God in German idealistic philosophy. Ideas about historical development of society.</p> <p>I. Fichte philosophic concept and its general principles. Transcendental idealism and F. Schelling.</p> <p>General points about Hegel’s absolute idealism: nature and history as the steps in Absolute Spirit’s development. History as self realizing of human freedom.</p>
	Philosophy the second half of the xix - early XX c.	Marxism. Positivism and Pragmatism. Philosophical anthropology. Philosophy of life. Philosophy of the unconscious. Existentialism. Phenomenology and Hermeneutics. Philosophical anthropology.
	Russian philosophy	Notable philosophers of the late 19th and early 20th centuries include Vladimir Solovyev, Vasily Rozanov, Leo Tolstoy, Sergei Bulgakov, Pavel Florensky, Nikolai Berdyaev, Pitirim Sorokin, and Vladimir Vernadsky.
II.	Systematic philosophy	
	Ontology	Appearance and development of Ontology. I. Kant’s critic of traditional ontology. Basic ontological principles: being and nothing, existence, possibility and reality, matter, motion, time, space. M. Heidegger’s “Fundamental ontology”.
	Gnoseology	Subject and object of knowledge. Subjective and objective

	(epistemology)	reality. Levels and steps of knowledge. Sensitive type of knowledge. Forms of abstract thinking. Term “knowledge”. Problem of truth and truth criteria.
	Ethics, aesthetics, axiology	Ethics studies in antique philosophy. Problem of morality. I. Kant and ethic idealism. Material ethics M. Scheller and R. Rorty. Morality as a form of social consciousness. Ethic problems in medical practice: death lethal injections, death leading illnesses, patients without medical insurance, etc. Understanding of Axiology. Main axiological problems, principles and concepts. Value, types of values. Examples of values. Importance of values in contemporary society and individual human daily life. Values and professional problems.
	Laws of dialectics	Understanding the term “Dialectics”: different meanings. Appearance of first dialectical ideas. Development of Dialectics in history of philosophy till 19 th century. Hegel idealistic dialectics: 3 laws of dialectics, main categories and principles. Materialistic dialectics. Marx and the use of Hegel dialectics. K. Popper and his critic of traditional dialectics.
	Laws of logic	Logic - the branch of philosophy concerned with the use and study of valid reasoning.
	Social philosophy	Society. System of social reality. Social relations and their types. Communication. Social activity. Various models of social reality. Historism: general features, place and role in social knowledge.
	Philosophy of religion	Religious explanation of the World: God and creation, God’s will and human behavior. Philosophic ideas about the World since ancient times till today: major concepts and directions, Some general statements for philosophic point of view. Scientific concept if the World: World like mechanism, types of rationality, positive and negative aspects of this concept.
	Philosophy of culture global problems of mankind	Various definitions of culture. Types of culture: traditional, industrial, postindustrial; ideal, material; eastern, western; professional culture, etc. and their explanations. Main problems related to Culture. Culture and Civilization: what is common what is different according to various concepts? Eastern and Western Culture: why we are talking about the conflict? Human mankind as a subject of history. Situation in the world at the end of 20 th - beginning of 21 st centuries. Appearance and origin of global problems. Methods for their exploration. Global modeling. Classification of global problems.

5.2. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
	History of philosophy	6	12					18	
	Systematic philosophy	6	12					18	
		12	24					36	72

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
	History of philosophy	Role-playing game. Colloquium. Discussion.	Test #1,2,3
	Systematic philosophy	Role-playing game. Colloquium. Discussion.	Test #4

7. Forms of control

7.1. Current forms of control

- oral (an interview, a report, a colloquium, presentations of projects)
- written (checking of tests, review papers, essays, abstracts, lecture notes, solving of practical tasks, preparation of a case history).

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass/fail test, examination, term paper)

Stages of the interim assessment

Stages of examination (pass/fail test)

1. Stage - __Knowledge tests №1 History of philosophy_____
(name of the stage)
2. Stage - __Knowledge tests №2 History of philosophy_____
(name of the stage)
3. Stage - __Knowledge tests №3 History of philosophy_____
(name of the stage)
4. Stage - __Knowledge tests №4 Systematic philosophy_____
(name of the stage)
5. Stage - _____ pass/fail test _____
(name of the stage)

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1. Makulin A. V. Philosophy a collection of test questions [Текст]/ A. V. Makulin; Northen State Medical University, Chair of the Humanities. -Архангельск: Изд-во СГМУ, 2014. -143 p.: il.
2. Алексеев П.В. Философия [Электронный ресурс] : учебник/ П. В. Алексеев, А. В. Панин. -4-е изд., испр. и доп. -Москва: ПРОСПЕКТ, 2015. -592 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785392146611.html>.
3. Макулин А. В. История философии [Электронный ресурс] : учеб. пособие/ А. В. Макулин; М-во здравоохранения Рос. Федерации, Сев. гос. мед. ун-т. - Архангельск: Изд-во Сев. гос. мед. ун-та, 2013. -444 с. - Режим доступа: http://nb.nsmu.ru/cgi-bin/irbis64r_11/cgiirbis_64.exe?LNG=&Z21ID=&I21DBN=ELIB&P21DBN=ELIB&S2

1STN=1&S21REF=3&S21FMT=fullwebr&C21COM=S&S21CNR=20&S21P01=0&S21P02=1&S21P03=I=&S21STR=elb/M%2017-630657.

4. Философия [Электронный ресурс] : учебник/ ред.: В. Д. Губин, Т. Ю. Сидорина. - 5-е изд., испр. и доп.. -Москва: ГЭОТАР-Медиа, 2016 - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785970436851.html>.
5. Хрусталеv Ю.М. Философия для медицинских вузов (естественно-научный и социально-гуманитарный диалог) [Электронный ресурс] : учебное пособие/ Ю. М. Хрусталеv, Н. В. Кишкин . -Ростов н/Д.: Феникс, 2016. -365 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785222263907.html>.

8.2. Supplementary literature

1. Балашов Л.Е. Философия [Электронный ресурс] : учебник/ Л. Е. Балашов. -Москва: Дашков и К, 2015. -612 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785394017421.html>.
 2. Макулин А. В. Рабочая тетрадь. Философия. Часть I. История философии [Электронный ресурс] : учебное пособие/ А. В. Макулин. -Архангельск, 2015. -234 с - Режим доступа: http://nb.nsmu.ru/cgi-bin/irbis64r_11/cgiirbis_64.exe?LNG=&Z21ID=&I21DBN=ELIB&P21DBN=ELIB&S21STN=1&S21REF=3&S21FMT=fullwebr&C21COM=S&S21CNR=20&S21P01=0&S21P02=1&S21P03=I=&S21STR=elb/M%2017-376999.
 3. Макулин А. В. Рабочая тетрадь. Философия. Часть II. Систематическая философия [Электронный ресурс] : учебное пособие/ А. В. Макулин. -Архангельск, 2015. -150 с - Режим доступа: http://nb.nsmu.ru/cgi-bin/irbis64r_11/cgiirbis_64.exe?LNG=&Z21ID=&I21DBN=ELIB&P21DBN=ELIB&S21STN=1&S21REF=3&S21FMT=fullwebr&C21COM=S&S21CNR=20&S21P01=0&S21P02=1&S21P03=I=&S21STR=elb/M%2017-504768.
 4. Разин А.В. Философия [Электронный ресурс] : учеб. пособие/ А. В. Разин. -2-е изд., перераб. и доп.. -Москва: ПРОСПЕКТ, 2015. -496 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785392143467.html>.
 5. Хрусталеv Ю.М. Философия [Электронный ресурс] : учебник/ Ю. М. Хрусталеv. - Москва: ГЭОТАР-Медиа, 2015. -464 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785970431849.html>.
- General List of additional literature see here: <http://www.philosophy.ru/lib/fortext/>

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
	philosophic library on-line (Russian/ English)	www.philosophy.ru	
	the dictionary of philosophic al terms and names	http://www.humanities.edu.ru/db/msg/2837	
	the	http://www.philosophypages.com/dy/	

	dictionary of philosophical terms and names		
	the entrance page to all articles in the philosophy section of the encyclopedia	http://en.wikipedia.org/wiki/philosophy	
	Meta-Encyclopedia of Philosophy	http://www.ditext.com/encyc/frame.html	
	the Internet Encyclopedia of Philosophy	http://www.utm.edu/research/iep/	
	the Stanford Internet Encyclopedia of Philosophy from A to Z	http://plato.stanford.edu/archives/sum2003/contents.html/#m	
	philosophic library online	http://onlinebooks.library.upenn.edu	

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
	Consultant student	http://www.studmedlib.ru/	

8.5. The list of the software and information & reference systems

- technical means: computer equipment and communications equipment (projector, laptop);
- Methods of learning using information technology (computer testing (Room 2306), demonstration of multimedia materials);
- A list of online services and electronic resources:
 1. Electronic Library System IPRbooks <http://www.iprbookshop.ru/>
 2. Consultant student <http://www.studmedlib.ru/>
 3. Digital Library of University <http://lib.nsmu.ru/lib>
- video-lectures in philosophy of religion

- films about life and deeds of major European and Eastern philosophers.

(thematic use of video materials depends on teacher)

During the seminars in “Philosophy of Culture” student are able to visit museums and excursions:

1. Art Museum: « Ancient Russian Art» и «18 – 19 century Russian Art.»
2. Museum Complex «House of Plotnikova»: «Old Arkhangelsk»

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
	Department of Humanities, NSMU, Troitsky Prospekt 51	2412	Personal computer and projector
	Department of Humanities, NSMU, Troitsky Prospekt 51	2416	Personal computer and projector
	Department of Humanities, NSMU, Troitsky Prospekt 51	2425	Personal computer and projector
	Department of Humanities, NSMU, Troitsky Prospekt 51	2428	Personal computer and projector

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
NORTHERN STATE MEDICAL UNIVERSITY
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A. K. Sherstennikova

June 16th 2021

SYLLABUS OF THE COURSE (MODULE)

Discipline **Bioethics**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1 / 1,2**

Form of the interim assessment **Pass/fail test**

Department **The Department of Humanities**

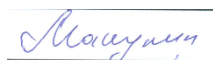
Discipline workload **72** (academic hours) / **2** (credits)

Approved at the department meeting:

Minutes No 11

June 9th 2021

Head of the department



A. V. Makulin

Author and compiler:

MAKULIN Artem Vladimirovich, Ph.D., docent,
Head of the Department of Humanities

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the Basic part of the curriculum (or to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects)

The discipline is related to prior subjects of the curriculum: **History**

The discipline is related to subsequent subjects of the curriculum: **Philosophy**

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive/diagnostic/organizational and administrative /research

2. Goal and tasks of the mastering of the discipline

- to form students' conscious attitude towards bioethics as a modern form of biomedical ethics, which are subject to the regulation of human relations
super task – saving the humankind.

2. Position of the course (module) within the structure of the educational program

The program is developed following the requirements of Federal State Education Standard (FSES) for higher education in the field of 31.05.01 «General medicine».

The program related to many academic disciplines, including such as "History", "Bioethics". In turn, the main provision of the philosophy is the basis for the formation of the individual specialist.

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
Universal competencies (UC)-№	
УК-5. Способен анализировать и учитывать разнообразие культур в процессе межкультурного взаимодействия	ИД-5.1. Соблюдает этические нормы и права человека ИД-5.2. Анализирует и учитывает в профессиональной деятельности этнокультурные, национальные и конфессиональные особенности
УК-9. Способен использовать базовые дефектологические знания в социальной и профессиональной сферах	ИД-9.1. Применяет эффективную коммуникацию и создает толерантную среду при взаимодействии с лицами с ограниченными возможностями здоровья и инвалидами в социальной и профессиональной деятельности
УК-11. Способен формировать нетерпимое отношение к коррупционному поведению	ИД-11.1. Использовать в профессиональной среде действующие правовые нормы, обеспечивающие борьбу с коррупцией ИД-11.2. Анализирует ситуацию на наличие коррупционной составляющей и прогнозирует последствия коррупционного поведения
General professional competencies (GPC) -№	
ОПК-1. Способен реализовывать моральные и правовые, этические и деонтологические принципы в профессиональной деятельности	ИД-1.1 Знает основы медицинской этики и деонтологии; основы законодательства в сфере здравоохранения; правовые аспекты врачебной деятельности. ИД-1.2. Умеет применять этические нормы и принципы поведения медицинского работника при выполнении своих профессиональных

	обязанностей; знание современного законодательства в сфере здравоохранения при решении задач профессиональной деятельности; применять правила и нормы взаимодействия врача с коллегами и пациентами (их законными представителями).
Professional competencies *(PC)- №	
ПК-	-

4. Volume of the course (module) and types of the academic classes:

Total workload of the course is 2 credits.

Type of the academic work	Total hours	Term	
		1	2
Students' contact work with the teacher (total)	36	18	18
Including:			
Lectures (L)	12	6	6
Seminars (Sem.)	24	12	12
Practical classes (PC)			
Clinical practicals (CP)			
Laboratory-based practicals (LBP)			
Simulation-based practicals (SBP)			
Preparation for the examination (PE)			
Preparation for the credit (PC)			
Exam consultations (EC)			
Coursework (CW)			
Unsupervised work (UW) (total)	36	18	18
Examination control (EC)			
Total discipline workload	72/2	36	36

5. Content of the course:

5.1. Content of the sections of the course

No	Name of the course section	Content of the section
1	2	3
1	General issues of bioethics	<ol style="list-style-type: none"> 1. Introduction to bioethics. Subject of bioethics, philosophical basics of bioethics. Historical models and general problems of medical ethics. Essential bioethical concepts. 2. Ethics of relationship between medical professionals and patients. The concepts of medical secrecy and confidentiality. Legal mapping and regulation. National and international rules of laws on medical confidentiality. 3. Correlation of religion and medicine. Areas of contact and differences. Contemporary disputes and controversy.
2	Current applied problems of bioethics	<ol style="list-style-type: none"> 4. Euthanasia, it's classification, legal aspects and norms. Bioethical issues of death and dying. 5. Ethics of abortion. Bioethical problems of conception, birth and creation of life. Ethics of prenatal screening and diagnosis. 6. Bioethical problems caused due to development of medical genetics and engineering. 7. Eugenics. History of development of science and its negative application. Bioethical problems associated with the desire to

		improve heredity qualities of human race. 8. Bioethical problems associated with development of transplantation of organs. Ethical values of organ donation. 9. Bioethical problems arising in psychiatric care. 10. Ethical and legal regulation of medical studies and trials involving human subjects. 11. The doctrine of animal rights. Ethical limits of animal use in medical research. 12. Cloning. Types of cloning and issues associated with creation of an idea and technology of cloning. 13. Placebo. Ethical aspects and norms of the use of placebo. 14. The Hippocratic Oath. Ethical content and relevance.

5.2. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
1	General issues of bioethics	6	12					18	36
2	Current applied problems of bioethics	6	12					18	36
		12	24					36	72

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	General issues of bioethics	Filling the tests from the workbook Report writing Essay Writing	In-class verification, explanation of the answers given, discussion in groups Verification Verification
2	Current applied problems of bioethics	Filling the tests from the workbook Report writing Essay Writing Creating presentations Conducting sociological surveys	In-class verification, explanation of the answers given, discussion in groups Verification Verification Verification Verification

7. Forms of control

7.1. Current forms of control

- oral (an interview, a report, a colloquium, presentations of projects)
- written (checking of tests, review papers, essays, abstracts, lecture notes, solving of practical tasks, preparation of a case history).

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass/fail test, examination, term paper)

Stages of the interim assessment

Stages of examination (pass/fail test)

1. Stage - **Electronic test. Final test on the whole course**
2. Stage – **Oral answer by exam questions**

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1. **Karabintseva A.A., Makulin A.V.** Bioethics. Arkhangelsk, Изд-во СГМУ, 2016. - 60p.
2. **Reich W. T.** (ed.), Encyclopedia of bioethics, The Free Press, New York, 1978 (V.1-4).
3. **Биоэтика. Этические и юридические документы, нормативные акты** [Электронный ресурс] : учеб. пособие/ сост.: И. А. Шапов, С. А. Абусуев. -Москва: ГЭОТАР-Медиа, 2014. -357 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785970429754.html>
4. **Хрусталеv Ю.М.** Биоэтика. Философия сохранения жизни и сбережения здоровья [Электронный ресурс] : учебник/ Ю. М. Хрусталеv. -Москва: ГЭОТАР-Медиа, 2017. -400 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785970440933.html>
5. **Шапов И.А.** Биомедицинская этика [Электронный ресурс] : [учебник для мед. вузов]/ И. А. Шапов. -Москва: ГЭОТАР-Медиа, 2014. -286 с.: ил. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785970429761.html>

8.2. Supplementary literature

1. Bioethics online dictionary: <http://www.eubios.info/biodict.htm>
2. A Cross-Cultural Introduction to Bioethics, Eubios Ethics Institute: http://www.eubios.info/cross_cultural_introduction_to_bioethics
3. Bioethics Case Studies / Eubios Ethics Institute and American University of Sovereign Nations: (http://www.eubios.info/bioethics_education)
4. Casebook on Human Dignity and Human Rights, UNESCO, 2011, Bioethics Core Curriculum Casebook Series, No. 1, UNESCO: Paris, p. vii
1. A Cross-Cultural Introduction to Bioethics, Eubios Ethics Institute: http://www.eubios.info/cross_cultural_introduction_to_bioethics
2. Bioethics Case Studies / Eubios Ethics Institute and American University of Sovereign Nations: (http://www.eubios.info/bioethics_education)

3. Back AL, Starks H, Hsu C, Gordon JR, Bharucha R, Pearlman RA. Clinician-patient interactions about requests for physician-assisted suicide: a patient and family view. Arch Intern Med. 2002; 162(11): 1257-1265
4. Battin, MP. The Least Worst Death. Oxford: Oxford University Press, 1994
5. Dobscha SK, Heintz RT, Press N, Ganzini L. Oregon physicians' responses to requests for assisted suicide: A qualitative study. J. Palliative Med. 2004; 7(3): 451-461
6. Wikipedia, the free encyclopedia – "Legality of euthanasia":
(https://en.wikipedia.org/wiki/Legality_of_euthanasia)
7. World Medical Association Declaration of Lisbon on the Rights of the Patient, The World Medical Association, Inc., October 2005

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
	Free encyclopedia	http://ru.wikipedia.org	
	Eubios Institute	http://www.eubios.info	
	Nuffield Council on Bioethics	http://nuffieldbioethics.org	
	National Academy Press	http://www.nap.edu/	
	World Medical Association	http://www.wma.net	
	UNESCO Bioethics programme	http://www.unesco.org/new/en/natural-sciences/special-themes/biodiversity/biodiversity-culture/bioethics/	
	World Health Organisation	http://www.who.int	

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
	moodle	1 course English medium Bioethics	+OK

8.5. The list of the software and information & reference systems

- technical means: computer equipment and communications equipment (projector, laptop);
- Methods of learning using information technology (computer testing (Room 2306), demonstration of multimedia materials);

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
	Department of Humanities, NSMU, Troitsky Prospekt 51	2412, 2416, 2425, 2428	Personal computer and projector

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
NORTHERN STATE MEDICAL UNIVERSITY
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A. K. Sherstennikova

June 16th 2021

SYLLABUS OF THE COURSE (MODULE)

Discipline **History**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1 / 2**

Form of the interim assessment **Pass/fail test**

Department **The Department of Humanities**

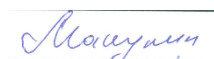
Discipline workload **72** (academic hours) / **2** (credits)

Approved at the department meeting:

Minutes No 11

June 9th 2021

Head of the department



A.V. Makulin

Author and compiler:

LAVRENTEVA Anna Yuryevna, Ph.D., senior lecturer,

Head of the Department of Humanities

Arkhangelsk, 2021

1. Position of the course (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the Basic part of the curriculum (or to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects)

The discipline is related to prior subjects of the curriculum: Philosophy

The discipline is related to subsequent subjects of the curriculum: Bioethics

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive/diagnostic/organizational and administrative /research/ The program is related to many academic disciplines, including such as "Philosophy", "Sociology", "Politics". In turn, the main provisions of the history is the basis for the formation of the individual specialist.

2. Goal and tasks of the mastering of the course

- to form students` conscious attitude towards history as a modern form of historical knowledge, which are subject to the regulation of human relations.

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
Universal competencies (UC)-№ UK-1. Is able to carry out a critical analysis of problem situations based on a systematic approach, to develop a strategy of actions	ID-1.1 Performs a critical analysis of information based on a systematic approach ID-1.2. Identifies problem situations based on critical analysis ID-1.3. Develops an action strategy for solving problem situations based on the systematic and interdisciplinary approaches
UK-5. Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	ID-5.1. Observes ethical norms and human rights ID-5.2. Analyzes and takes into account the ethno-cultural, national and confessional features ID-5 in professional activity.3. Forms a tolerant environment of interaction when performing professional tasks ID-5.4. Overcomes barriers in the process of intercultural interaction
General professional competencies (GPC) -№	
Professional competencies *(PC)- №	

*The list of professional competencies is based on the requirements of the professional standard "General medicine (district physician)", approved by the order of the Ministry of Labor and Social Protection of the Russian Federation of March 21, 2017 No. 293n

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 2 credits.

Type of the academic work	Total hours	Term
		2
Students'contact work with the teacher (total)	36	36
Including:		
Lectures (L)	12	12

Seminars (Sem.)	24	24
Practical classes (PC)		
Clinical practicals (CP)		
Laboratory-based practicals (LBP)		
Simulation-based practicals (SBP)		
Preparation for the examination (PE)		
Preparation for the credit (PC)		
Exam consultations (EC)		
Coursework (CW)		
Unsupervised work (UW) (total)	36	36
Examination control (EC)		
Total discipline workload	72/2	72

5. Content of the course:

5.1. Content of the sections of the course

No	Name of the course section	Content of the section
1	2	3
1	Introduction to the discipline of History.	Functions of historical knowledge. The main methods of studying history. The main sources of the study of history. The world-historical process: unity and diversity. Basic concepts of the history of society. Types of civilizations. The influence of geopolitical factors on history. The main scientific concepts of the history of Russia. The geopolitical situation and its influence on the direction and nature of Russia's historical development. The mentality of the Russian people. The place and role of Russia in world history.
2	Ancient Slavs and Kievan Rus (IX-XIII centuries) Culture of Kievan Rus (IX-XIII centuries) Culture of India	The origin and settlement of the Eastern Slavs; their occupations. The formation of the Old Russian statehood. The adoption of Christianity and the role of Orthodoxy in Russian history. The fight against the external aggression of the Ancient Russian state. Fragmentation: causes, specifics, consequences. Economic and political history of the Russian lands during the period of fragmentation. The Tatar-Mongol yoke and its role in the history of the Russian people. Culture of Kievan Rus (IX-XIII centuries) Culture of India.
3	The Russian centralized state (XIV-XVII centuries) and Culture	Formation of the Russian centralized state (activity of Ivan III and Ivan the Terrible). The Romanov Dynasty. The culture of the Russian centralized state.
4	The Russian Empire of the XVIII - XIX centuries . The "Golden Age" of Russian culture.	The politics of Peter the Great, Catherine the Great. Reforms of Alexander I: from Liberalism to Conservatism. Foreign policy: The Patriotic War of 1812. Reforms of Alexander II. The internal policy of Nicholas II. Revolutionary-military events of the beginning of the XX century. The "Golden Age" and the "Silver Age" in Russian culture.
5	Russia in the XX century. The Revolution of 1917 The creation	Formation of a new political system. Cultural policy. The Great Patriotic War. Achievements of the USSR in

	of the USSR (1922). The Great Patriotic War (1941-1945) Cultural ties between the USSR and India after independence.	space exploration and the use of nuclear energy. The collapse of the USSR as a result of crisis phenomena. Cultural ties between the USSR and India after independence.
6	Russia at the turn of the century (XX-XXI centuries). General history	Education of the Russian Federation. The first President of the Russian Federation B.N. Yeltsin. Formation of a new political system. A new concept of foreign and domestic policy.

5.2. Sections and types of studies

№ п/п	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
1	Introduction to the discipline of History.	2	2					5	9
2	Ancient Slavs and Kievan Rus (IX-XIII centuries) Culture of Kievan Rus (IX-XIII centuries) Culture of India	2	4					5	11
3	The Russian centralized state (XIV-XVII centuries) and Culture	2	4					5	11
4	The Russian Empire of the XVIII - XIX centuries . The "Golden Age" of Russian culture.	2	6					8	16
5	Russia in the XX century. The Revolution of 1917 The creation of the USSR (1922). The Great Patriotic War (1941-1945) Cultural ties between the USSR and India after independence.	2	4					8	14
6	Russia at the turn of the century (XX-XXI centuries) General history	2	4					5	11
		12	24					36	72

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
	1 course English medium Bioethics		Test

7. Forms of control

7.1. Current forms of control

- oral (an interview, a report, a colloquium, presentations of projects)
- written (checking of tests, review papers, essays, abstracts, lecture notes, solving of practical tasks, preparation of a case history).

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass/fail test, examination, term paper)

Stages of the interim assessment

Stages of examination (pass/fail test)

1. Stage - Electronic test. Final test on the whole course

2. Stage – Oral answer by exam questions

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) ‘Set of the evaluation tools for the current control and interim assessment of students’.

8. Library and information materials of the course

8.1. Compulsory literature

1. History of Russia [Electronic resource] : textbook. manual/ A. S. Orlov [et al.]. -Moscow: PROSPEKT, 2015 - Access mode: <http://www.studentlibrary.ru/book/ISBN9785392164394.html>
2. History of Russia [Text] : textbook/ A. S. Orlov [et al.]; Moscow State University named after M. V. Lomonosov. Ist. fac.. -4th ed., reprint. and add.. -Moscow: Prospekt, 2015. -527, [1] p.
3. Matyukhin A.V. History of Russia [Electronic resource] : textbook/ A.V. Matyukhin, Yu. A. Davydova, R. E. Azizbayeva. -4th ed., ispr. and add.. -Moscow: Synergy University, 2018. -312 p. - Access mode: <http://www.studentlibrary.ru/book/ISBN9785425702722.html> .
4. Sakharov A.N. The modern history of Russia [Electronic resource] : textbook/ A. N. Sakharov, A. N. Bokhanov, V. A. Shestakov ; ed. by A. N. Sakharov. -Moscow: PROSPEKT, 2015. -480 p. - Access mode: <http://www.studentlibrary.ru/book/ISBN9785392163946.html> .
5. Sakharov A. N. History of Russia from ancient times to the present day [Electronic resource] : textbook/ A. N. Sakharov, A. N. Bokhanov, V. A. Shestakov. -Moscow: PROSPEKT, 2014 - Access mode: <http://www.studentlibrary.ru/book/ISBN9785392124824.html> .

8.2. Supplementary literature

1. Деревянко А.П. История России: с древнейших времен до наших дней [Электронный ресурс]/ А. П. Деревянко, Н. А. Шабельникова , А. В. Усов. -4-е изд., перераб. и доп.. - Москва: ПРОСПЕКТ, 2016. -672 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785392192144.html> .
2. Жукова Л.В. История России в датах: справочник [Электронный ресурс]/ Л. В. Жукова, Л. А. Кацва. -Москва: ПРОСПЕКТ, 2014 - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785392124701.html>.
3. История России в датах [Электронный ресурс]/ А. С. Орлов [и др.]. -Москва: ПРОСПЕКТ, 2014 - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785392134120.html>.
4. История СССР/РФ в контексте современного россияведения [Электронный ресурс] : учебное пособие/ И. А. Агакишиев [и др.] ; ред.: Е. И. Пивовар, А. Б. Безбородов. -Москва: ГЭОТАР-Медиа, 2015. -400 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785392163144.html>.
5. Сахаров А.Н. История России с древнейших времен до наших дней [Электронный ресурс] : в 2 т., Т. 2/ А. Н. Сахаров, А. Н. Боханов , В. А. Шестаков ; ред. А. Н. Сахаров. - Москва: ПРОСПЕКТ, 2015. -720 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785392167746.html>.
6. Сахаров А.Н. История России с древнейших времен до наших дней [Электронный ресурс] : в 2 т., Т. 1/ А. Н. Сахаров, А. Н. Боханов , В. А. Шестаков ; ред. А. Н. Сахаров. - Москва: ПРОСПЕКТ, 2015. -544 с. - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785392163113.html>.
7. Гацунаев К.Н., История [Электронный ресурс] : учебное пособие для студентов заочной формы обучения и экстерната/ К.Н. Гацунаев - М. : Издательство МИСИ - МГСУ 2017,. -

- 117 с. - ISBN в 978-5-7264-1776-9 - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785726417769.html>
8. Молокова Т.А., История [Электронный ресурс]: учебник / Т.А. Молокова, К.Н. Гацунаев, О.М. Вызова, М.Г. Ефремова, А.А. Мурашев, Т.Л. Пантелеева, Ю.В. Посвятенко, В.П. Фролов - М. : Издательство МИСИ - МГСУ 2017,. - 290 с. - ISBN в 978-5-7264-1653-3 - Режим доступа: <http://www.studentlibrary.ru/book/ISBN9785726416533.html>
9. Штолль Г.В, История Древнего Рима в избранных биографиях [Электронный ресурс] : аудиокнига / Штолль Г.В.; пер. с нем. под ред. Я. Гуревича; читает Станислав Федосов. Время звучания 8 час. 41 мин., носитель 1 CD, формат: mp3, 160 Кбит/с, 16 бит, 44,1 кГц, стерео. - М.: Студия АРДИС, 2011. (Серия "Историческая библиотека") - ISBN -- - Режим доступа: <http://www.studentlibrary.ru/book/AUDIO-62059.html>
10. Штолль Г.В., История Древней Греции в избранных биографиях [Электронный ресурс] : аудиокнига / Штолль Г. В.; пер. с нем.; читает Станислав Федосов . Время звучания 6 час. 51 мин., носитель 1 CD, формат: mp3, 192 Кбит/с, 16 бит, 44,1 кГц, стерео. . - М.: Студия АРДИС, 2011. (Серия "Историческая библиотека") - ISBN -- - Режим доступа: <http://www.studentlibrary.ru/book/AUDIO-62912.html>
11. Моммзен Т., История Рима [Электронный ресурс] : аудиокнига / Моммзен Т. ; перевод и краткое изложение Н. Д. Чечулина; читает Станислав Федосов . Время звучания 15 час. 36 мин., носитель 2 CD, формат: mp3, 160 Кбит/с, 16 бит, 44,1 кГц, стерео. - М.: Студия АРДИС, 2009. (Серия "Историческая библиотека") - ISBN -- - Режим доступа: <http://www.studentlibrary.ru/book/AUDIO-59578.html>
12. Малия М. Россия глазами Запада: От Медного Всадника до Мавзоля Ленина. - Кембридж : Гарвардский университет. Пресса, 2000. - XII, 514 с.
13. Россия: Кембриджская энциклопедия России и бывшего Советского Союза / под ред. А. Брауна. - Кембридж : Кембриджский университет. Пресса, 1994. - 604 с.
14. Сарин Т.Р. Русская революция и Индия : исследование советской политики в отношении индийского национального движения, 1922-29. - Нью-Дели : Издательство Стерлинг, 1978. - IX, 164 с.

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
	Free encyclopedia	http://ru.wikipedia.org	
	Student Consultant	http://www.studmedlib.ru /	
	Electronic Library of the University	http://lib.nsmu.ru/lib	Educational materials
	Institute of Russian History of the Russian Academy of Sciences	http://iriran.ru /	Digital collections of scientific and historical literature and historical sources
	Institute of the Russian Academy of Sciences	http://www.spbiiran.nw.ru /	Digital collections, digital libraries, databases, etc.
	Collection of references of the Faculty of History of Lomonosov Moscow State University	http://www.hist.msu.ru/ER/sources.htm	Digital collections, digital libraries, databases, etc

	Media library	http://histrf.ru/mediateka	
	NEB - National Electronic Library	http://neb.pdf	Videos on the History of Russia
	Scientific electronic library	http://www.elibrary.ru	Open resource Scientific electronic Library eLibrary.RU
	The "Web of Science" database	https://www.webofscience.com	Database
	Elsevier Publishing House	https://www.sciencedirect.com/	Database
	Springer Nature Publishing House	https://link.springer.com /	Database
	Scopus database	https://www.scopus.com/	Access from university computers Database "Scopus"
	Student Electronic Library	http://www.studentlibrary.ru /	Student Electronic Library

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
	Consultant student	http://www.studmedlib.ru/	

8.5. The list of the software and information & reference systems

- technical means: computer equipment and communications equipment (projector, laptop);
- Methods of learning using information technology (computer testing (Room 2306), demonstration of multimedia materials);
- A list of online services and electronic resources:

1. Electronic Library System IPRbooks <http://www.iprbookshop.ru/>
 2. Consultant student <http://www.studmedlib.ru/>
 3. Digital Library of University <http://lib.nsmu.ru/lib>
 - video-lectures in philosophy of religion
 - films about life and deeds of major European and Eastern philosophers.
- (thematic use of video materials depends on teacher)
- During the seminars in "Philosophy of Culture" student are able to visit museums and excursions:
1. Art Museum: « Ancient Russian Art» и «18 – 19 century Russian Art.»

2. Museum Complex «House of Plotnikova»: «Old Arkhangelsk»

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
	Department of Humanities, NSMU, Troitsky Prospekt 51	2412	Personal computer and projector
	Department of Humanities, NSMU, Troitsky Prospekt 51	2416	Personal computer and projector
	Department of Humanities, NSMU, Troitsky Prospekt 51	2425	Personal computer and projector
	Department of Humanities, NSMU, Troitsky Prospekt 51	2428	Personal computer and projector

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **History of medicine**

Field of training: **31.05.01 General Medicine**

Year (s) of study / term(s) **1/1,2**

Form of the interim assessment **Final test (pass/fail)**

Department **of Public Health, Health Care and Social Work**

Discipline workload **72 academic hours / 2 credits**

Approved at the department meeting

Minutes No.

June 15th 2021

Head of the department:



E. A. Mordovsky

Author and compiler:

A.G. Kalinin, professor of the Department of Public health, Health care and Social work,
M.D., Dr.Sc.

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSES) for higher education in the field of 31.05.01 «General medicine».

The program is designed in accordance with the requirements of the Federal state educational standard 3+-. The discipline is a mandatory part of the curriculum.

The discipline is related to subsequent subjects of the curriculum in the courses of humanities, social and economic disciplines, including: philosophy; bioethics, economics, psychology and pedagogy, law; foreign languages, in the courses of mathematical, natural science, medical and biological disciplines, including mathematics, medical Informatics, general hygiene; epidemiology.

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive/diagnostic/organizational and administrative /research

2. Goal and tasks of the mastering of the discipline

The purpose of discipline:

Preparation of students for the implementation of professional activities in the field of history of medicine. Formation of the necessary level of theoretical knowledge and fundamentals, the study of patterns of development and the history of medicine in the integrative connection with the development of socio-economic formations, history, philosophy, natural science and cultural achievements.

Tasks of discipline:

1. Building knowledge of the origin and development of certain specific medical-biological, hygienic, clinical disciplines; the role of prominent figures;

2. Formation of skills to use a historical research method and thinking as an integral part of the dialectical method, contributing to everyday practice of health professionals (doctors, nurses) and medical management;

3. Formation of competency of the historical and analytical approach to the objective evaluation of medical, hygienic knowledge about human health and disease at different stages of human development;

4. Building knowledge of the role of medicine in general culture and history of the people; know the history of scientific schools and trends in medicine, ethics and deontology of health workers

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
УК-5 Способен анализировать и учитывать разнообразие культур в процессе межкультурного взаимодействия	<p>Able to analyze and take into account the diversity of cultures in the process of intercultural interaction.</p> <p>Indicators of competence achievement:</p> <p>ID-5.1. Complies with the ethical standards and human rights.</p> <p>ID-5.2. Analyzes and takes into account the ethno-cultural, national and confessional features in professional activities.</p> <p>ID-5.3. Forms a tolerant environment of interaction when performing professional tasks.</p> <p>ID-5.4. Overcomes barriers in the process of intercultural interaction</p>
ОПК-1. Способен реализовывать моральные и правовые, этические и деонтологические принципы в профессиональной деятельности	<p>Able to implement moral and legal, ethical and deontological principles in professional activities.</p> <p>Indicators of competence achieved:</p> <p>ID-1. Knows the basics of medical ethics and deontology; the basics of legislation in the field of healthcare; legal aspects of medical activity.</p> <p>ID-2. Knows how to apply ethical standards and principles of behavior of a medical professional in the performance of their professional duties; knowledge of modern legislation in the field of healthcare in solving professional tasks; apply the rules and norms of interaction of a doctor with colleagues and patients (their legal representatives).</p> <p>ID-3. Has practical experience in solving standard tasks of professional activity on the basis of ethical norms and deontological principles in interaction with colleagues and patients (their legal representatives), knowledge of the legal aspects of medical activity.</p>

Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 2 credits.

Type of the academic work	Total hours	Term	
		1	2
Students' contact work with the teacher (total)	36	18	18
Including:			
Lectures (L)	12	6	6
Seminars (Sem.)	24	12	12
Practical classes (PC)			
Clinical practicals (CP)			
Laboratory-based practicals (LBP)			
Simulation-based practicals (SBP)			
Preparation for the examination (PE)			
Preparation for the credit (PC)			
Exam consultations (EC)			
Coursework (CW)			
Unsupervised work (UW) (total)	36	18	18
Examination control (EC)			
Total discipline workload	72/2	36	36

5. Course content:

5.1. Contents of the sections of the course

No	Name of the course section	Content of the section
1.	History of medicine as a science and a subject teaching. Medicine in primitive society	History of medicine as science and part of the history of culture. Stages of development of medicine in connection with the development and change of socio-economic formations. The periodization of the history of medicine. Becoming a human being in the course of employment. The first implements. The discovery of fire. The emergence of healing. The first physicians. The concept of disease and health. Help with injuries, childbirth.
2.	Medicine in the Ancient World	The development of medicine in the states of Egypt, Mesopotamia, India and China - the general notion about the causes of the disease, its treatment and prevention. Written Monuments of medical law and medical practice activities: laws of Hammurabi, the Egyptian papyri, Indian AyurVeda. Medicine of Ancient Greece - the first hospital, medical school, Hippocrates, the foundations of his teachings. Collection of Hippocrates. Medicine in Ancient Rome - sanitary measures and

		sanitary facilities (water, baths). Organization of the military medical service. Galen and his teachings.
3.	Medicine in the Middle Ages	Medicine in the Byzantine Empire, its influence on the development of medicine in other countries. Medicine in the Arab Caliphate. Medicine peoples of Central Asia. Abu Ali ibn Sina - Great scholar. His teachings about the structure of the body, the action of drugs and symptoms of the disease. "Canon of Medicine". Medicine in Western Europe during the Renaissance - natural science advances and their impact on medicine. Development yatrohimicheskikh yatrofizicheskikh and representations of the world. The development of anatomy as a science. Work Visalia A. "On the structure of the human body." The emergence of the doctrine of infectious diseases J. Fracastoro and his work "The contagious diseases and treatment." Development of surgery. Ambroise Pare and issues of dentistry.
4.	Medicine of New time.	Characteristics of era. The successes of the natural sciences, their impact on the development of medicine: the theory of organic evolution, the theory of heredity and variation. The development of anatomy, histology, microbiology, physiology. Clinical medicine: internal medicine, infectious diseases, surgery, gynecology and obstetrics. Most important discoveries in medicine in 19-20 th centuries.
5.	Medicine Newest time.	Period features. Health care in Russia in 20 th – 21st centuries. Health of the Soviet period. Maternal and child health. Prophylactic direction. Key achievements in medicine in 20th century. International cooperation in the field of health. World Health Organization. International Red Cross. The League of Red Cross and Red Crescent Societies.

5. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
1	History of medicine as a science and a subject teaching. Medicine in primitive society	2	3					8	13
2	Medicine in the Ancient World	2	9					10	21
3	Medicine in the Middle Ages	2	-					2	2
4	Medicine of New time	2	9					15	26
5	Medical Newest time	2	3					5	10
6	Total:	12	24					36	72

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	History of medicine as a science and a subject teaching. Medicine in primitive society	Review of scientific publications, preparing presentations, and test tasks in Moodle SDS	Check presentations and test tasks.
2	Ancient medicine in Greece and Rome Impair	Review of scientific publications, preparing presentations, and test tasks in Moodle SDS	Check presentations and test control.
3.	Medieval Medicine of Western Europe	Review of scientific publications, preparing presentations, and test tasks in Moodle SDS	Check presentations and test control
4.	The rise of scientific medicine in Europe in the XVIII-XIX centuries.	Review of scientific publications, preparing presentations, and test tasks in Moodle SDS	Check presentations and test control
5.	Medicine of New time	Review of scientific publications, preparing presentations, and test tasks in Moodle SDS	Check presentations. Test control
6	Medical Newest time	Test tasks in the Moodle system. Design of a multimedia presentation on the topic	Check presentations. Test control

7. Forms of control

8.1. Current forms of control

- oral (an interview, a report)
- written (checking of tests, review papers, essays, abstracts, lecture notes, solving of practical tasks).

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

8.2. Forms of the interim assessment (pass/fail test, term paper)

Stages of the interim assessment

1. Test control
2. Interview on checklist

Questions for a pass/fail test, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

Stages of examination (pass/fail test)

1. Stage - checking each lesson (regular)
2. Stage - checking of the whole course (final test)

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1. Lisitsyn Y.P. History of Medicine: A textbook for medical students. M.: GEOTAR - Media. 2020 - 352c. <https://www.rosmedlib.ru/book/ISBN9785970454459.html>
 2. Sorokina TS History of Medicine: A textbook for students of higher medical educational institutions, 9th Edition, Revised. and dop.-M.: Academia, 2009-560c.
 3. The Oxford Handbook of the History of Medicine. Oxford University Press., 2013 - 693 p.
 4. History of Medicine. Cambridge University Press., 2013 - 160 p.
-

8.2. Supplementary literature

1. Y P Munjal & Surendra K Sharma: API Textbook of Medicine, Ninth Edition, Two Volume Set. JayPee Brothers, 2012.

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
	www.nsmu.ru - Digital Library System "Consultant student" www.studmedlib.ru - wikipedia.org - medeffect.ru - www.people.su - www.who.org	http://nsmu.ru/eng/ http://nsmu.ru/eng/About%20NSMU/about_nsmu.php https://en.wikipedia.org/wiki/Public_health https://www.who.int https://www.who.int/news-room/fact-sheets	History, outstanding alumni's and structure of NSMU Porpoises, priorities, current practice, global perspectives, history, country examples. Porpoises, priorities, structure, governance, global perspectives, history, country examples.

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
	The list of software: - Microsoft Office - SunRav TestOfficePro 5 - Adobe Reader 9 - BigBlueButton Open Source Virtual Classroom Software - Zoom Video Communications		

8.5. The list of the software and information & reference systems

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
1		4 th floor, main building	PC systems, Power Point system
2		4 th floor, main building	PC systems, Power Point system

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **Foreign language**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1 / 1,2**

Form of the interim assessment **Pass/fail test**

Department **of foreign languages and Russian language as foreign**

Discipline workload **108** (academic hours) / **3** (credits)

Approved at the department meeting

Minutes No. 10

June 15th 2021

Head of the department



O.I. Vorobyova

Author and compiler:

Candidate of Philological Sciences, Associate Professor of the Department of Foreign
Languages and Russian as a Foreign Language A.T. Ashkharava

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the Basic part of the curriculum: developed for students of the international faculty (foreign students), for whom Russian is a foreign language.

The discipline is related to prior subjects of the curriculum: none

The discipline is related to subsequent subjects of the curriculum: Russian language (1-4 years)

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive/diagnostic/organizational and administrative /research. The discipline "Foreign language" has an applied meaning, is the basis for studying Russian as a foreign language - a means of obtaining professional knowledge (during training at the university) and means of their implementation (during practical training). This discipline is focused on the formation of universal competencies in the field of communication and intercultural interaction with the involvement of information and communication technologies as one of the ways of teaching.

2. Goal and tasks of the mastering of the discipline

The goal of mastering the discipline is to prepare students for the implementation of professional activities in the field of health care using a foreign (Russian) language. Students master a new means of communication - the state language of the country in which they are studying, which is necessary for comfortable living in a new socio-cultural environment, for obtaining and using professional knowledge. The discipline "Foreign language" involves the mastery of all types of speech activity (speaking, listening, reading, writing) in an amount corresponding to the elementary level of Russian language proficiency (A1– Level of Elementary Communication (Breakthrough Level)) with the use of knowledge, skills and abilities in the field of information technologies to optimize the process of mastering Russian as a foreign language and the formation of a linguistic personality capable of self-education in the field of learning foreign languages.

Tasks of the discipline

1. knowledge formation

- about the Russian language as the national language of the Russian people, the originality of its grammatical structure, lexical richness, functional and stylistic diversity;
- about the sound-letter basis of the Russian language, the basic norms of modern Russian literary pronunciation;
- about the grammatical structure of the Russian language (initial information about the significant and service parts of speech, their lexical and grammatical categories, basic syntactic models);
- about individual thematic groups (vocabulary of everyday and professional communication in the amount of at least 780 units);
- about the peculiarities of Russian speech etiquette and basic communicative tactics and strategies (request, gratitude, etc.);
- about the possibilities and ways of using electronic resources in the study of foreign languages (educational portals, websites, mobile applications, electronic translators and dictionaries) .

the formation of skills (mastering different types of speech activity in a foreign language, as well as information resources in the field of learning foreign languages):

- read and understand simple sentences that are contained in ads, posters, advertisements, etc., understand and extract basic information from a short text on familiar topics (reading);
 - build written statements on various topics (about yourself, about friends, about family, about study, about your free time) based on questions (writing).
 - to understand by ear the statements of the interlocutor, as well as the content of short dialogues and monologues in situations of daily communication (listening);
 - participate in dialogical communication, be able to answer / ask questions, in particular, about yourself, about friends, about family, about studies, about free time (speaking);
 - choose an effective communication strategy in the context of intercultural dialogue (communication);
 - use electronic educational resources (linguistic simulators) for the formation of speech skills, solid mastery of the lexical and grammatical structure of the language; electronic translators and dictionaries for speech understanding / production (IT).
- skill building
- fluent reading of simple texts (monologues and dialogues);
 - listening and understanding speech in the target language with a low speed of pronunciation;
 - the use of the studied linguistic units in the classroom and in the conditions of real communication (everyday, socio-cultural, academic spheres of communication) for the production of oral and written statements;
 - the use of educational portals, sites, video channels for the study of foreign languages for the formation of your own language learning strategy.
 - the use of information technology for independent work and homework (electronic dictionaries, translators, linguistic simulators, etc.)

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
Universal competencies (UC)-№4 - capable to use modern communication technologies, including in a foreign (s) language (s), for academic and professional interaction	UC-4.1. Expresses his thoughts in Russian and foreign languages in business communication UC-4.2. Complies with the norms of Russian and foreign languages when speaking in public UC-4.3. Compiles texts in Russian and foreign languages related to professional activities UC-4.4. Uses modern information and communication tools and technologies UC-4.5. Drafts, translates, edits various academic and professional texts
Universal competencies (UC)-№5 - able to analyze and incorporate a variety of cultures during the intercultural interaction	UC-5.1. Respects ethical norms and human rights . UC-5.2. Analyzes and takes into account ethnocultural, national and confessional peculiarities in professional activity UC-5.3. Forms a tolerant environment of interaction when performing professional tasks . UC-5.4. Overcomes barriers in the process of

	intercultural interaction .
--	-----------------------------

*The list of professional competencies is based on the requirements of the professional standard "General medicine (district physician)", approved by the order of the Ministry of Labor and Social Protection of the Russian Federation of March 21, 2017 No. 293n

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 3 credits.

Type of the academic work	Total hours	Term	
		1	2
Students' contact work with the teacher (total)	54	28	26
Including:			
Lectures (L)			
Seminars (Sem.)			
Practical classes (PC)	54	28	26
Clinical practicals (CP)			
Laboratory-based practicals (LBP)			
Simulation-based practicals (SBP)			
Preparation for the examination (PE)			
Preparation for the credit (PC)			
Exam consultations (EC)			
Coursework (CW)			
Unsupervised work (UW) (total)	54	8	46
Examination control (EC)			
Total discipline workload	108/3	36	72

5. Course content:

The program content is oriented to national standard demands to the elementary level of Russian language as a foreign (State Standard of the Russian language as foreign Elementary. / Vladimirov et al TE -. 2- ed and extra -... M . - SPb .: "Zlatoust", 2001) .

5.1. Contents of the sections of the course

No	Name of the course section	Content of the section
1	Introductory phonetic course (General information on the language and on the peculiarities of his study in the course "Foreign Language". The graphics, phonetics, orthography of the modern Russian literary language).	General characteristics of the Russian national language. Russian as the state language of the Russian Federation. Methods of mastering Russian as a foreign language. Basic textbooks and information and communication resources in the Foreign Language course, how to use them (LMS Moodle , ZOOM video conferencing, communication channel - WhatsApp). Resources for unsupervised work (applications and websites for the study of the Russian language for foreign citizens). Sound-alphabetic composition of the modern Russian literary language. Writing and meaning of Russian letters, a syllable principle of Russian graphics. About the basic rules for reading words. Russian word stress and its main characteristics (different placing and fluidity). Sounds in speech: modification of vowel and

		<p>consonant sounds. Basic intonation constructions in Russian</p> <p>Linguistic simulators for the formation of auditory-pronunciation skills. Online electronic keyboard with Russian fonts. Text-to-voice programs (ICE Book Reader Professional)</p>
2	Main course: The main parts of speech of the Russian language and their use	<p>The composition of the word. Concept of word stem and ending. Noun. Gender and number of nouns. Case forms of nouns in the singular. Thematic group "Names of persons by sex, age, profession, etc.", "Kinship terms". Russian proper names.</p> <p>Personal pronouns. Meaning, case forms and use.</p> <p>Possessive and demonstrative pronouns. Meaning, case forms and use. Coordination in gender and number with nouns.</p> <p>Full adjectives, gender and number agreement with nouns in the nominative case. Short adjectives in a limited set (рад, занят, болен, должен). Thematic groups "Color", "Size", etc., evaluative adjectives (<i>хороший, плохой</i>).</p> <p>The verb as the center of the sentence. infinitive. Species-tense forms of the verb. Verb conjugations. Imperative.</p> <p>Verbs of intellectual activity (<i>думать, читать, знать</i>), existential (<i>жить, находиться</i>), perception (<i>слушать, слышать, смотреть</i>), etc.</p> <p>Numerals. Cardinal and ordinal numbers in the nominative case. Quantitative-nominal combinations (<i>одна книга, две, три, четыре книги, пять книг</i>).</p> <p>Adverbs of place, time, measure and degree. predicative adverbs (<i>можно, нельзя</i>), interrogative adverbs (<i>как, когда, где..</i>)</p> <p>Prepositions (<i>в, на, из, с, к, у, о</i>), conjunctions (<i>и, или, а, но</i>, etc) particles (<i>не, даже</i>).</p> <p>Simple sentences: two-part and one-part. The order of words in a sentence (adjective + noun; adverbs + verb; subject group + predicate group), sentences with a locative. The concept of a subject and a predicate. Compound sentences with unions and, but, but, or, not only ... but also. Interrogative sentences with words (<i>что, кто, как, какой, чей, куда, откуда</i>)</p> <p>Electronic translators (PROMT machine translation system, Yandex translator, Google Translate)</p> <p>Electronic dictionaries (ABBY Lingvo live)</p>
3	Speech topics (dialogues, texts on everyday and educational topics)	<p>Acquaintance. Basic speech formulas (initiation of acquaintance). Features of Russian national etiquette. Politeness as a nationally specific category.</p> <p>Greetings, farewells in an informal and formal setting.</p> <p>Request, gratitude (to acquaintances and strangers).</p> <p>Communicative requesting tactics in educational and everyday situations.</p> <p>Verbal and written apology.</p> <p>Expression of communicative intentions in various situations (in a store, at a post office, in a cafe, in a library, at a university, in transport), an expression of an assessment, an attitude towards something / someone. Communication between doctor and patient. Dialogues "At the Doctor's", "At the Polyclinic",</p>

		<p>“At the Pharmacy”.</p> <p>Monological statements "Story about yourself", "My friend", "Family", "Studying at the university", "Free time", "Well-being".</p> <p>Educational YouTube channels for learning Russian as a foreign language: RikiStudy, RussianLessons.Net; Learn Russian with RussianPod101.com</p>
--	--	---

5.2. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
1	Introductory phonetic course (Graphics, phonetics, orthoepy)			10				10	20
2	Main course: The main parts of speech of the Russian language and their use			22				22	44
3	Speech topics (dialogues, texts on everyday and educational topics)			22				22	44
	Total			54				54	108

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	Introductory phonetic course (Graphics, phonetics, orthoepy)	<p>(1) Performing phonetic exercises to develop auditory-pronunciation skills (listening and reading), including using IT:</p> <ul style="list-style-type: none"> - site for students of NSMU https://russianlaunch.blogspot.com/p/phonetics.html - Talk2Russia mobile application (Phonetics section); - Russian pronunciation simulators: http://learnrussian.rt.com/phonetics/ https://easypronunciation.com/ru/practice-russian-pronunciation-online http://www.russianforeveryone.com/Rufe/Lessons/Course1/Introduction/IntrUnit1/IntrUnit1.htm (IR training) <p>(2) repetition of what was learned (Russian alphabet). Watching a video lecture https://edu.nsmu.ru/mod/url/view.php?id=119663</p> <p>(3) Completion of written assignments for the formation of graphic skills: mastering the</p>	Control exercises in the lesson. Checking tasks in LMS Moodle.

		printed and written font, upper and lower case letters and the rules for their use, punctuation marks. Working with an online electronic keyboard. (4) Reading text with preliminary preparation using text-to-speech software (ICE Book Reader Professional)	
2	Main course: The main parts of speech of the Russian language and their use	Interactive game tasks for mastering the lexical and grammatical minimum: (1) numerals from 1 to 100 https://learningapps.org/5714683 (2) description of the weather (impersonal sentence with the words warm / cold) https://wordwall.net/play/7339/901/959 (3) word order in the sentence (weather description + locative) https://wordwall.net/play/7554/255/347 (4) vocabulary of the thematic group "Food" and "Color" https://wordwall.net/play/8219/686/966 (5) color coding (work with cards) https://quizlet.com/ru/553744506/%D0%9A%D0%B0%D0%BA%D0%BE%D0%B9-%D1%86%D0%B2%D0%B5%D1%82- flash-cards /? x = 1jqt (6) repetition of training material (knowledge of vocabulary and basic syntactic models) https://wordwall.net/play/9302/126/426 (7) personal verb forms in the present tense (read and do) https://wordwall.net/play/9303/553/992 (8) personal verb forms in the present tense (speak and write) + question-answer unity https://wordwall.net/play/9390/873/554 (9) personal two-part sentences with verbs speak, write (competitive play between course participants) https://quizlet.com/561076265/match?i=3ba7pu&x=1Kqt (10) personal two-part sentences with the verb speak and adverbs (interrogative and declarative) https://wordwall.net/play/9575/043/720 (11) personal two-part sentences with the verb buy and locatives (mastering the prepositional-case combination of nouns in the prepositional case with the prepositions B / HA) The game "Lost" https://wordwall.net/play/9819/124/166 (12) Vocabulary test https://edu.nsmu.ru/mod/quiz/attempt.php?attempt=1064859&cmid=72942	Screenshots of completed assignments, grand total: the number of points and the time taken to complete the assignment. Oral questioning in the classroom. Checking tasks in LMS Moodle. Testing.
3	Speech	1) Watching the training video "How to	Conversation in the

topics (dialogues, texts on everyday and educational topics)	memorize new Russian words?" https://www.youtube.com/watch?v=5pM359QIgzw (2) Topic "Acquaintance" https://www.youtube.com/channel/UCHI9xvLM-UJjj_bbtHhHmBA), (RikiStudy channel) (3) Watching the training video "Phrases of Russian speech etiquette" (greeting, invitation, acquaintance, etc.) https://edu.nsmu.ru/mod/url/view.php?id=72941 (4) Watching the training video "I'm happy" (expression of positive emotions in Russian) https://www.youtube.com/watch?v=bmdp9W9kYVw and other training videos (at the teacher's choice) on RikiStudy, RussianLessons.Net channels https://www.youtube.com/channel/UCq1b1x1nZbV-rmZDb3XOB2g), Learn Russian with RussianPod101.com https://www.youtube.com/channel/UCUg_JDaHFAPEiFGDMddoIzA).	lesson. Individual survey. Online conference with native speakers (conversation on the topics studied: getting into real communication).
--	--	--

7. Forms of control

7.1. Current forms of control

- oral (an interview, a report, a colloquium, presentations of projects)
- written (checking of tests, review papers, essays, abstracts, lecture notes, solving of practical tasks, preparation of a case history).

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass/fail test, examination, term paper)

Stages of examination (pass/fail test)

1. Stage - "Final test № 1" (performance of oral and written assignments on the LMS Moodle using an online microphone).
2. Stage - "Preparation of an oral report and PowerPoint presentation on one of the proposed topics in Russian".
3. Stage - "Final test №2" (performance of oral and written assignments on the LMS Moodle).

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1. Дорога в Россию [Текст] : учеб. рус. яз. : (элементар. уровень)/ В. Е. Антонова [и др.] [Кн.] 1. - 10-е изд.: Златоуст: ЦМО МГУ, 2013. - 341, [1] с.: ил.

2. Овсиенко Ю.Г. Русский язык для начинающих (для говорящих на английском языке) [Текст] : [учебник]/ Ю. Г. Овсиенко Кн. 1: Русский язык, 2013. - 472 с.: ил.

3. Алексеева О. В. Рабочая тетрадь по русскому языку как иностранному. Предложно-падежная система: учеб.-метод. пособие/ О.В. Алексеева. -Архангельск: Изд-во СГМУ, 2018. - 150 с.

8.2. Supplementary literature

1. Методические рекомендации по русскому языку как иностранному для студентов I - II курсов [Текст] /О. Н. Маслова; Север. гос. мед. ун-т. каф. рус. яз. как иностр. - Архангельск: [б. и.], 2014. – 37 с.

2. Петанова А.Ю., Коваленко Ю.Е. Время говорить по-русски! Сетевой учебно-методический интерактивный комплекс по русскому языку для начинающих. М., 2013. http://www.speakrussian.cie.ru/time_new

3. Богомолов А.Н. и др. В эфире Россия. Сетевой мультимедийный интерактивный учебник по русскому языку М., ЦМО МГУ. http://www.dist-learn.ru/default.asp?id=course_begin

4. Рублева Е.В. и др. Learn Russian Сетевой мультимедийный учебник для начинающих изучать русский язык. <http://learnrussian.rt.com>

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
Resources for learning curriculum (language theory) and practice exercises			
1	Electronic library of NSMU	http://www.nsmu.ru/lib/	The resource contains electronic versions of textbooks on Russian as a foreign language from the main list of literature.
2	Time to speak Russian	https://www.irlc.msu.ru/irlc_projects/speak-russian/time_new/	The site contains a variety of materials (lessons, grammar reference book, tests, dictionaries, etc.). Convenient interface, good structure of the course.
3	Learn Russian step by step	https://learnrussianstepbystep.com	The site provides lessons on all grammatical topics necessary for an elementary level, speech models and vocabulary tests are given in a separate section.
4	Everyday Russian	https://everydayrussianlanguage.com	The site contains educational materials (lessons with explanations of grammar, tasks for mastering vocabulary and grammar).

5	Russian for everyone	http://www.russianforeveryone.com	The site contains educational materials, including an introductory phonetic course, as well as thematic lessons.
6	Quizlet	https://quizlet.com	A resource containing a variety of flashcards for learning educational material as well as games.
Resources for training exercises and monitoring			
	Learningapps	https://learninapps.org	A site containing exercise templates (for grading, multiple choice tests, etc.). Convenient for organizing students' independent work (memorizing language units). One of the ways to activate the mechanisms of memorizing new material with the help of motor and visual mechanisms.
	Wordwall	https://wordwall.net	A site containing templates for various tasks, including quizzes, word games, crosswords, which can be used both interactively and in print.
	Quizlet	https://quizlet.com	A resource containing a variety of flashcards for learning educational material as well as games.

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
1	MOODLE (with the use of video lessons in ZOOM with the use of electronic boards MIRO)	1 course Foreign language Russian Language as foreign (Ph.D., associate professor of NSMU O.V. Alekseeva) https://edu.nsmu.ru/course/view.php?id=1394	depending on the conditions of study: (1) blended learning + EC (2) blended learning + EC

8.5. The list of the software and information & reference systems

In carrying out the educational process, students and faculty use the following software: operating system - MS Windows Vista Starter, MS Windows Prof 7 Upgr; office suite - MS Office 2007; other software - 7-zip, AdobeReader, Kaspersky Endpoint Security

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
	classrooms for seminar-type classes № 1513 1514 1515 1515a 1516 1516a 1521 1521 a	NSMU Troitsky Ave., 51, building 1, 5th floor	each auditorium has 15-20 seats, double tables, a board, stands. Bookcases and / or shelves: No. 1513, 1514, 1515a, 1516, 1516a, 1521 Special equipment: No. 1513 - TV, laptop No. 1516 - TV, laptop No. 1516a - screen, projector

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **Latin language**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1 / 2**

Form of the interim assessment **Pass/fail test**

Department **of foreign languages and Russian as a foreign language**

Discipline workload **108** (academic hours) / **3** (credits)

Approved at the department meeting

Minutes No.

June 15th 2021

Head of the department



Vorobyova O.I

Author and compiler:

Khokhlova L.A., Doctor of Psychology, Associate Professor

Arkhangelsk, 202

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of **31.05.01 «General medicine»**.

The discipline is related to the disciplines **of the Basic part of the curriculum** (or to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects).

The discipline is related to prior subjects of the curriculum:- Russian language.

The discipline is related to subsequent subjects of the curriculum: as the course “Latin language” focuses on providing the basis of medical terminology mastering of the course is a necessary prerequisite for such disciplines as Anatomy, Physiology, Therapy, Surgery and others.

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive/diagnostic/organizational and administrative /research.

2. Goal and tasks of the mastering of the discipline

The goal of mastering the course is a professionally oriented teaching of Latin language and laying the foundations of medical terminology competence required for professional communication.

Tasks arising from the goal: providing the knowledge necessary for operative use of medical nomenclature in the field of anatomical, clinical and pharmaceutical names.

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
Universal competencies (UC)-№UK-4 Able to use modern communicative technologies, in a foreign language as well, for academic and professional interaction	ID-4.1. Expresses his/her thoughts in Russian and foreign languages in business communication ID-4.2. Complies with the norms of Russian and foreign languages when speaking in public ID-4.3. Compiles texts in Russian and foreign languages related to professional activities ID-4.4. Uses modern information and communication tools and technologies ID-4.5. Compiles, translates, edits various academic and professional texts

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 3 credits.

Type of the academic work	Total hours	Term
		2
Students' contact work with the teacher (total)	54	54
Including:		
Lectures (L)		
Seminars (Sem.)		
Practical classes (PC)	54	54
Clinical practicals (CP)		
Laboratory-based practicals (LBP)		
Simulation-based practicals (SBP)		
Preparation for the examination (PE)		
Preparation for the credit (PC)		
Exam consultations (EC)		
Coursework (CW)		
Unsupervised work (UW) (total)	54	54
Examination control (EC)		
Total discipline workload	108/3	108

5. Contents of the Course:

5.1. Contents of the sections of the course

No	Name of course section	Contents of the section
1	Section 1. Phonetics.	Topic 1. Rules of Reading.
2	Section 2. Basics of Anatomical Terminology.	Topic 1. Parts of Speech.
3	Section 3. Basics of Clinical Terminology and Word-building.	Topic 1. Clinical Terms – Word Combinations. Topic 2. Compound Clinical Terms
4	Section 4. Basics of Pharmaceutical Terminology. Prescription.	Topic 1. Pharmaceutical Terms and Rules for Writing out Prescription. Topic 2. Chemical Nomenclature.

5.2. Sections and types of studies

No	Name of course section	L	P	S	LBP	CP	UW	Total hours
1	Section 1. Phonetics. Topic 1. Rules of Reading		2				2	4
2	Section 2. Basics of Anatomical Terminology. Topic 1. Parts of Speech.		18				18	36
3	Section 3. Basics of Clinical Terminology and Word-building. Topic 1. Clinical Terms – Word Combinations. Topic 2. Compound Clinical Terms.		2 10				2 10	4 20
4	Section 4. Basics of Pharmaceutical Terminology. Prescription. Topic 1. Pharmaceutical Terms and Rules for Writing out Prescription. Topic 2. Chemical Nomenclature.		8 8				8 8	16 16

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle)

No	Name of course section	Type of unsupervised work	Forms of control
1	Phonetics.	Reading words and word combinations	interview, tests
2	Basics of Anatomical Terminology.	Phrases compilation	interview, tests
3	Basics of Clinical Terminology and Word-building.	Translating and explaining clinical terms	interview, tests
4	Basics of Pharmaceutical Terminology. Prescription.	Translation of prescriptions into Latin, writing out the drug names in Latin with explanation of the used common stems	interview, tests

7. Forms of control

7.1. Current forms of control

- oral (an interview)
- written (test checking, checking synopses).

A subject list of test papers is shown at the Appendix №3 to syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass/fail test, examination, term paper)

Students have pass/fail test at the end of the first/second term.

Stages of the interim assessment:

1. Stage - 5 anatomical terms to be rendered from Latin into English and 5 ones to be rendered from English into Latin;
2. Stage - 15 clinical terms in total with some of them to be explained and some of them to be constructed using the studied term-elements;
3. Stage - 4 pharmaceutical terms to be translated from English into Latin;
4. Stage - 2 prescriptions to be translated from English into Latin;
5. Stage - 3 names of the drugs to be written out in Latin with explanation of the used common stems.

Questions for a pass/fail test, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

Фомина, В. С. Латинский язык и основы медицинской терминологии на английском языке [Электронный ресурс] : учеб. пособие / В. С. Фомина. - 2-е изд., стер. - Архангельск : Изд-во СГМУ, 2011. - 121 с. - URL: http://nb.nsmu.ru/cgi-bin/irbis64r_11/cgiirbis_64.exe?LNG=&Z21ID=&I21DBN=ELIB&P21DBN=ELIB&S21STN=1&S21REF=3&S21FMT=fullwebr&C21COM=S&S21CNR=20&S21P01=0&S21P02=1&S21P03=I=&S21STR=elb/Ф%2076-560294

8.2. Supplementary literature

Kostromina, T. A. The language of medicine as a means of professional communication [Text]: (guide in the language for foreign students of the med. dep.) / T.A. Kostromina ; Kursk State Med. Univ. = Язык медицины как средство профессионального общения : учеб. пособие по дисциплине "Латин. яз. и основы мед. терминологии" для иностр. студентов лечеб. фак. (на англ. яз.) / Т.А. Костромина ; Курс. гос. мед. ун-т. - Kursk : [s. n.], 2007. - 198 p. - References: p. 196. - ISBN 978-5-7487-1192-0

Mitrofanova T.A. Latin-English dictionary of clinical terms for learners [Текст] : словарь/ Т. A. Mitrofanova ; Nizhny Novgorod Medical Academy. -N.Novgorod: Publishing House of Nizhny Novgorod State Medical Academy, 2007. -52 p.

Mitrofanova T.A. A Course book in the Latin language and the basics of anatomohistological terminology [Текст] : manual/ Т. A. Mitrofanova, T. G. Shirokogorodova; Nizhny Novgorod Medical Academy. -N.Novgorod: Publishing House of Nizhny Novgorod State Medical Academy, 2005. -153 p.

Mitrofanova T.A. The fundamentals of clinical terminology [Текст] : manual/ Т. A. Mitrofanova, L. V. Shirokova, L. G. Strongin; Nizhny Novgorod Medical Academy. - N.Novgorod: Publishing House of Nizhny Novgorod State Medical Academy, 2007. -102 p.

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
1	Electronic library system «Консультант студента»	http://www.studmedlib.ru/	Medical literature on healthcare
2	Scientific library	http://iprbookshop.ru	Textbooks for higher medical education, industry literature, electronic versions of periodicals

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model

8.5. The list of the software and information & reference systems

Kaspersky endpoint Security. Номер лицензии 26FE - 191125 -134819 - 1 -8403.
 MS Office 2007. MS Win Starter 7. MS Windows Prof 7 Upgr. MS Windows Server CAL 2008 Device CAL. Номер лицензии 46850049, бессрочно Radmin Viewer 3. Radmin Server 3. № doc/ 11001793 Traffic inspector. Лицензионное соглашение № 1051- 08 от 10.04.2008

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study	List of the main equipment of
---	------------------------	-----------------------	-------------------------------

		room	the study room
1	Classrooms for conducting classes, ongoing monitoring and interim assessment № 2355	Arkhangelsk, Troitsky avenue , 51 administrative building, 3rd floor	<p>A set of educational furniture (tables, chairs, screen, blackboard) teacher's workplace, workplaces for students (14 seats)</p> <p>Sets of demonstration equipment: a laptop, a projector</p> <p>Teaching aids: visual aids, handouts for practical exercises on all topics of the discipline.</p>
1	Classrooms for conducting classes, ongoing monitoring and interim assessment № 2356	Arkhangelsk, Troitsky avenue, 51 administrative building, 3rd floor	<p>A set of educational furniture (tables, chairs, screen, blackboard) teacher's workplace, workplaces for students (20 seats)</p> <p>Sets of demonstration equipment: a laptop, a projector</p> <p>Teaching aids: visual aids, handouts for practical exercises on all topics of the discipline.</p>
1	Classrooms for conducting classes, ongoing monitoring and interim assessment № 2357	Arkhangelsk, Troitsky avenue, 51 administrative building, 3rd floor	<p>A set of educational furniture (tables, chairs, screen, blackboard) teacher's workplace, workplaces for students (22 seats)</p> <p>Sets of demonstration equipment: a laptop, a projector</p> <p>Teaching aids: visual aids, handouts for practical exercises on all topics of the discipline.</p>

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **Doctor`s work Psychology**

Field of training **31.05.01 General Medicine**

Year (s) of study **1 / 2 term (s)**

Form of the interim assessment: **credit**

Department **of Pedagogy and Psychology**

Discipline workload **108** (academic hours) / **3** (credits)

Approved at the department meeting

Minutes No.

June 9th 2021

Head of the department



Vasilyeva E. Yu.

Author and compiler:

Gaikina M. Yu., Ph.D., Associate Professor of the Department of Pedagogy and
Psychology

Nizovtseva T.R., Art. Lecturer at the Department of Pedagogy and Psychology

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the Basic part of the curriculum (or to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects)

The discipline is related to prior subjects of the curriculum: Philosophy, Bioethics

The discipline is related to subsequent subjects of the curriculum: public health and health care, psychiatry, medical psychology, clinical disciplines, educational and industrial practice.

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive/diagnostic/organizational and administrative /research

2. Goal and tasks of the mastering of the discipline

Goals: the formation of students' foundations of professional competencies necessary for solving typical problems in the field of psychological and pedagogical activities of future doctors.

Tasks:

1. Awareness of the importance of the application of psychological and pedagogical knowledge in the activities of a doctor.
2. Formation of knowledge about the psychological foundations of a doctor's work, the psychology of a doctor's personality.
2. Formation of skills necessary for cooperation, productive interaction in the professional sphere.
4. Development of professionally important qualities, such as: communication skills, responsibility, humanity, empathy, tolerance, ability to reflect
3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
Universal competencies (UC)-№1	
Able to carry out a critical analysis of problem situations based on a systematic approach, develop an action strategy	ID-1.1 Carries out a critical analysis of information based on a systematic approach ID-1.2. Identifies problem situations based on critical analysis ID-1.3. Develops an action strategy for solving problem situations based on a systematic and interdisciplinary approach
Universal competencies (UC)-№3	
Able to organize and manage the work of a team, developing a team strategy to achieve the settled goal	ID-3.1. Develops a teamwork strategy to achieve a set goal ID-3.2. Forms a team and leads its work in order to achieve the set goal ID-3.3. Defines the management style for effective team work ID-3.4. Arguments and defends his opinion, bears personal responsibility for the result ID-3.5. Resolves conflicts and contradictions within the team
Universal competencies (UC)-№6	
Able to determine and implement the priorities of his own activity and ways to improve it based on self-esteem and education throughout his life	ID-6.1. Evaluates its resources and their limits (personal, situational, temporary), uses them optimally for the successful fulfillment of professional tasks

	ID-6.2. Plans and controls independent activities in solving professional problems ID-6.3. Builds an educational trajectory of professional development
General professional competencies (GPC) -№10	
Able to solve standard tasks of professional activity using information, bibliographic resources, biomedical terminology, information and communication technologies, taking into account the basic requirements of information security	ID-10.1. Knows how to apply modern information and communication technologies to solve problems of professional activity; carry out an effective search for information necessary to solve the problems of professional activity using reference systems and professional databases; use modern biomedical terminology; master and apply modern information and communication technologies in professional activities, taking into account the basic requirements of information security
Professional competencies *(PC)- №	
Ability and readiness to conduct sanitary and hygienic education of the population, train patients and medical workers in order to prevent the occurrence (or) spread of diseases, their early diagnosis, identify the causes and conditions of their occurrence and development	ID-1.1. Knows how to conduct sanitary and hygienic education among children and adults (their legal representatives) and medical workers in order to form a healthy lifestyle and prevent the most common diseases; to form in children and adults (their legal representatives) behavior aimed at maintaining and increasing the level of somatic health. ID-1.2. He is proficient in the methods and forms of organizing communication, techniques and methods of attracting the population to training in hygienic measures of a health-improving nature.

*The list of professional competencies is based on the requirements of the professional standard "General medicine (district physician)", approved by the order of the Ministry of Labor and Social Protection of the Russian Federation of March 21, 2017 No. 293n

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 3 credits.

Type of the academic work	Total hours	Term
		2
Students' contact work with the teacher (total)	54	54
Including:		
Lectures (L)	18	18
Seminars (Sem.)	16	16
Practical classes (PC)	20	20
Clinical practicals (CP)		
Laboratory-based practicals (LBP)		
Simulation-based practicals (SBP)		
Preparation for the examination (PE)		
Preparation for the credit (PC)		
Exam consultations (EC)		
Coursework (CW)		
Unsupervised work (UW) (total)	54	54
Examination control (EC)		
Total discipline workload	108/3	108

5. Course content:

5.1. Contents of the sections of the course

№	Name of the course	Content of the section
---	--------------------	------------------------

п/п	section	
1	2	3
1	Module 1. Physician work's psychology	1. Professional medical practice. Stages of professional development. 2. The system of continuing medical education. Accreditation system. 3. Psychological and pedagogical aspects of a doctor's activities: patient education. 4. Psychological and pedagogical aspects of a doctor's activities: interaction with patients of different ages. 5. Multi-brigade approach in the professional activity of a doctor.
2	Module 2. Personality of a doctor	1. Model of the doctor's personality: features of cognitive processes and professionally important qualities of a doctor. 2. Crises of professional development. Professional deformations. Professional burnout. 3. Professional motivation ..

5.2. Sections and types of studies

№ п/п	Name of the discipline sections	L	S	P		UW	Total
1	2	3	4	5	6	8	9
1	Module 1. Doctor's work psychology	10	8	10		28	56
2	Module 2. Personality of a doctor	8	8	10		26	52
		18	16	20		54	108

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
	Module 1. Doctor's work psychology	Oral presentation	Interview, check of notes, glossary
	Module 2. Personality of a doctor	Oral presentation	Interview, check of notes, glossary

7. Forms of control

7.1. Current forms of control

- oral (an interview, a report, a colloquium, presentations of projects)
- written (checking of tests, review papers, essays, abstracts, lecture notes, solving of practical tasks, preparation of a case history).

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass/fail test, examination, term paper)

Stages of the interim assessment

Credit forms.

Stages of the test

1. Stage - testing

2. Stage - oral interview on issues

Questions for test and exam are given in Appendix No. 4 to the work program "Evaluation Tools"

9. Library supply

Provides educational, methodological, educational and scientific literature for the entire discipline as a whole. The list of educational literature for the study of the course consists of two parts: main and additional.

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

Vasilyeva E.Yu.

Professional behavior of a healthcare professional in communicating with a patient: manual for medical students / E.Yu. Vasilyeva. -Arkhangelsk: NSMU Publishing, 2021.- 162 p.

Vasilyeva E.Yu.

Communication and patient education: a manual for medical student / E.Yu. Vasilyeva. –Arkhangelsk, 2016.-175p.

8.2. Supplementary literature

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

Resources	URL address	Resource Annotation
Scientific Library of the Northern State Medical University	http://lib.nsmu.ru/lib/external/	Electronic educational resources
Scientific electronic library	www.elibrary.ru	The largest Russian information and analytical portal in the field of science,

		technology, medicine and education, containing abstracts and full texts of more than 25 million scientific articles and publications
--	--	--

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model

8.5. The list of the software and information & reference systems

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
	Classroom	Arkhangelsk, Troitsky prospect, 51, 3rd floor No. 1359	Specialized educational furniture, 15 tables, 30 chairs. Demonstration equipment: multimedia projector 1, laptop 1, educational board 1

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
‘NORTHERN STATE MEDICAL UNIVERSITY’
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A. K. Sherstennikova

16th June 2021

SYLLABUS OF THE COURSE (MODULE)

Discipline **Biophysics**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1 / 1, 2**

Form of the interim assessment **Pass/fail test**

Department of Medical and biological physics

Discipline workload **72** (academic hours) / **2** (credits)

Approved at the department meeting:

Minutes No

June 16th 2021

Head of the department



A.A. Karyakin

Author and compiler:
Anikina Natalja Urevna, PhD

Arkhangelsk, 2021

1. Position of the course (module) within the structure of the educational program

The program is drawn up following the requirements of Federal State Education Standard (FSES) for higher education in the field of 06.01.01 «General medicine». Cycle (division) of OOP, this discipline behaves to that, - mathematical, naturally - scientific. The basic training medical practice, necessary for studying chemical and profile the disciplines that are taught in parallel with the data subject or subsequent courses. Learning the disciplines of Physics, mathematics should be preceded by the study subjects: physiology, biochemistry, Microbiology and Virology, hygiene, public health, neurology, radiology and radiation therapy, infectious diseases. To study this discipline necessary knowledge and skills generated in the school course of physics and mathematics.

2. Goal and tasks of the mastering of the course

The goal of the study of educational discipline "Physics, mathematics" is the formation of medical students a systematic knowledge of the physical properties and physical processes in biological objects, necessary, as for learning other academic disciplines, and for direct formation of specialist medical practice.

The tasks of the discipline are:

- the formation of the modern scientific views about the surrounding material world;
- to develop in students the methodological orientation, essential for solving problems of evidence based medicine;
- the formation of the students ' logical thinking, the ability to accurately to formulate the problem, the ability to isolate the main and secondary the ability to draw conclusions based on the obtained measurement results;
- in the development of students mathematical methods solutions intellectual tasks aimed at maintaining the health of the population with into account the adverse impacts of the environment;
- the formation of the students ' environmental approach various biomedical and social problems;
- teaching students safety when working with medical equipment.

3. The planned results of the development of the educational program provided by the discipline (module).

Codes of formed competencies/formulations of competencies	Competence achievement indicator
GPC-10. Able to accept the principles of modern information technology and use them to solve the problems of professional activity	AI-10.1. Is able to apply modern information technologies to solve the tasks of professional activity; to carry out an effective search for information necessary to solve the tasks of professional activity using reference systems and professional databases; to use modern medical and biological terminology; to master and apply modern information technologies in professional activity, taking into account the basic requirements of information security.
	AI-10.2. Is able to use modern information and bibliographic resources, use special software and automated information systems to solve standard tasks of professional activity, taking into account the basic requirements of information security

4. Volume of the course (module) and types of the academic classes:

Total workload of the course is 2 credits.

Type of the academic work	Total hours	Term	
		1	2
Students'contact work with the teacher (total)	36	18	18
Including:			
Lectures (L)	12	6	6
Seminars (Sem.)			
Practical classes (PC)	12	6	6
Clinical practicals (CP)			
Laboratory-based practicals (LBP)	12	6	6
Simulation-based practicals (SBP)			
Preparation for the examination (PE)			
Preparation for the credit (PC)			
Exam consultations (EC)			
Coursework (CW)			
Unsupervised work (UW) (total)	36	18	18
Examination control (EC)			
Total discipline workload	72/2	36	36

5. Contents of the course:

5.1. Contents of the sections of the course

No.	Name of the course section	Contents of the section
1	2	3
	<u>Topic 1</u> Elements of biomechanics	Elements of biomechanics of human blood circulation.Elements of biomechanics of the musculoskeletal system and biophysics of human muscle contraction.
	<u>Topic 2</u> Fundamentals of biophysics of biological membranes and electrography of tissues and organs	Biophysical foundations of the structure and functioning of biological membranes. Transport of substances through membranes. The potential of rest, the potential of action, its spread. Biophysical fundamentals of electrography of organs and systems. Physical basics of electrocardiography.
	<u>Topic 3</u> Elements of biological electrodynamics	Basic ideas about the electrical properties of biological tissues. The effects of direct, pulsed current, low frequency, alternating current on biological tissues, application in medicine. The effects of RF, UHF, and microwave EMF bands on biological tissues.
	<u>Topic 4</u> Elements of hearing and vision biophysics	Physical and physiological characteristics of sound. The Weber-Fechner Law. Sound research methods in medicine. Elements of hearing biophysics. Refractive and light-perceiving vision devices. Elements of biophysics of vision. Research methods of the human visual analyzer.
	<u>Topic 5</u> Elements of ionizing radiation and dosimetry	Basic concepts of ionizing radiation and their effects on biological tissues. Basics of dosimetry

5.2. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
1	Elements of biomechanics	2		6		2		6	16
2	Fundamentals of biophysics of biological membranes and electrography of tissues and organs	4		2		2		12	20
3	Elements of biological electrodynamics	2		2		2		6	12
4	Elements of hearing and vision biophysics	2		2		2		6	12
5	Elements of ionizing radiation and dosimetry	2				4		6	12

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	Elements of biomechanics	Lecture, Solving problems	lecture notes, solving of practical tasks
2	Fundamentals of biophysics of biological membranes and electrography of tissues and organs	Lecture, Situational tasks	lecture notes, solving of practical tasks
3	Elements of biological electrodynamics	Lecture Situational tasks	lecture notes, solving of practical tasks
4	Elements of hearing and vision biophysics	Situational tasks	solving of practical tasks
5	Elements of ionizing radiation and dosimetry	Lecture, Situational tasks	lecture notes, solving of practical tasks

7. Forms of control

7.1. Current forms of control

- oral (an interview, a report, a colloquium, presentations of projects)
- written (checking of tests, review papers, essays, abstracts, lecture notes, solving of practical tasks, preparation of a case history).

7.2. Forms of the interim assessment -pass & fail test

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1. Compendium of Medical Physics, Medical Technology and Biophysics [Текст] : for students. -Arhangelsk: ИЦ СГМУ, 2008. -249 p.

8.2. Supplementary literature

8.3. The list of resources of the information and telecommunication environment "Internet", necessary for the development of the discipline (module)*

№	Name of resource	URL address	Resource annotation
1	EBS "Student Consultant»	http://www.studmedlib.ru/	Catalog of articles on various topics
2	Electronic library system IPRbooks	http://www.iprbookshop.ru/	Catalog of articles, textbooks and manuals on various topics
3	Scientific Electronic Library eLibrary	http://www.elibrary.ru	Каталог научных статей по различной тематике
4	Electronic catalog and full-text electronic library of the NSMU	http://lib.nsmu.ru/lib/	Catalog of articles, textbooks and manuals on various topics
5	Web – medicine	http://webmed.i rkutsk.ru	Catalog of articles on various topics
6	MedLib — medical library	http://med-lib.ru/	Catalog of articles, textbooks and manuals on various topics

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)*

№	Source DLT	Name of the e-course, author s, URL address	E-course implementation model
	<i>Moodle</i>	1 course English medium Physics Mathematics. Mathematics https://edu.nsmu.ru/course/view.php?id=609	<i>mixed learning +EC</i>

8.5. The list of the software and information & reference systems

1. Open physics" program test "t-Tester", simulation the program for determining the radioactive decay of elements, the browser Internet Explorer
2. Multimedia lectures throughout the course of discipline

9. Material and technical facilities necessary for the educational process

No.	The name of the school's office	Location of the study room	List of the main equipment of the study room
1	<i>A school's office of laboratory and seminar type, group and individual consultations, current monitoring and intermediate certification, for unsupervised work.</i>	Troitsky 51, No. 1437	seats - 24 Laptop Projector UHF devices - 2 pcs. Stands - 3 pcs. Oscilloscope - 2 pcs. Electrocardiograph US device 2 pcs
2	<i>A school's office of laboratory and seminar type, group and individual</i>	Troitsky 51, No. 1438	Seats - 30 Laptop Projector Screen

	<i>consultations, current monitoring and intermediate certification, for unsupervised work.</i>		Microscope - 4 pcs. Polarimeter - 1 pc. Portable polarimeter - 5 pcs. Refractometer - 2 pcs. Anamaloscope - 2 pcs. He-Ne Laser Electrocardiograph
3	<i>A school's office of laboratory and seminar type, group and individual consultations, current monitoring and intermediate certification, for unsupervised work.</i>	Troitsky 51, No. 1439	seats - 20 PCs connected to audiometers - 2 pcs. Bicycle ergometer - 1 pc. Exercise bike - 1 pc. Photoelectric colorimeter Electrocardiograph Laboratory balance Micrometers Calipers Settings with deflection indicator He-Ne Laser
4	<i>A computer class of laboratory and seminar type, group and individual consultations, current monitoring and intermediate certification, for unsupervised work.</i>	Troitsky 51, No. 1443	seats without PC - 14 PC - 11 pcs Projector Screen Electrocardiograph Laboratory balance Micrometers Calipers Settings with deflection indicator
5	<i>A computer class of laboratory and seminar type, group and individual consultations, current monitoring and intermediate certification, for unsupervised work.</i>	Troitsky 51, No. 2518	seats without PC - 20 PC - 15 pcs Laptop Projector
6	<i>A computer class of laboratory and seminar type, group and individual consultations, current monitoring and intermediate certification, for unsupervised work.</i>	Troitsky 51, No. 2515	seats without PC - 16 PC - 13 pcs Laptop

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **Economics**

Field of training **31.05.01 General Medicine**

Year of study / term(s) **1 / 1**

Form of the interim assessment **Pass/fail test**

Department **of economy and management**

Discipline workload **72** (academic hours) / **2** (credits)

Approved at the department meeting

Minutes No. 9

June 15th 2021

Head of the department



Zykova N.V.

Author and compiler:

Sukhanov Georgii Genrihovitch , candidate of economic science, associate professor

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the Basic part of the curriculum

The discipline is related to prior subjects of the curriculum:

The discipline of Economics is based on the knowledge obtained as part of a school course in economics or related subjects of secondary vocational education.

Subsequent subjects of the curriculum: Business Communications of the curriculum:

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: organizational and administrative /research

2. Goal and tasks of the mastering of the discipline

The goal is to develop future expert the necessary level of theoretical knowledge and the foundations of economic science, allowing to adequately assess and effectively implement emerging economic relations in professional medical activities . Tasks: development of economic thinking. The formation of knowledge about the basic provisions of the economic science. Foster in students the use of economic skills knowledge in practice

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
Universal competencies (UC)-№ 10	IA -10.1 Uses basic economic knowledge to solve problems in all areas of life
	IA-10.2 . Justifies the adoption of economic decisions using the factors of economic planning and analysis to achieve the goals

*The list of professional competencies is based on the requirements of the professional standard "General medicine (district physician)", approved by the order of the Ministry of Labor and Social Protection of the Russian Federation of March 21, 2017 No. 293n

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 2 credits.

Type of the academic work	Total hours	Term
		1
Students'contact work with the teacher (total)	36	36
Including:		
Lectures (L)	12	12
Seminars (Sem.)	12	12
Practical classes (PC)	12	12
Clinical practicals (CP)		
Laboratory-based practicals (LBP)		
Simulation-based practicals (SBP)		
Preparation for the examination (PE)		
Preparation for the credit (PC)		

Exam consultations (EC)		
Coursework (CW)		
Unsupervised work (UW) (total)	36	36
Examination control (EC)		
Total discipline workload	72/2	72

5. Course content:

5.1. Contents of the sections of the course

No.	Name of the course section	Contents of the section
1	Demand and Supply	The Allocation of Scarce Resources, Demand, Supply, Market Equilibrium, The price elasticity of demand, The price elasticity of supply, Effects of a Sales Tax
2	The ownership and management of the firms: short-run costs	Economic costs The law of diminishing returns Fixed costs , Variable costs The total costs, Average fixed, average variable, and average total costs, Marginal cost
3	The ownership and management of the firms: long-run costs	Long-Run Production Costs Firm Size and Costs The long-run ATC, or planning, curve, Economies and Diseconomies of Scale
4	Competition	Four Basic Market Models Characteristics of the Four Basic Market Models Competitive firms Pure monopoly Profit maximization by a pure monopolist Price discrimination Monopolistic competition
5	Macroeconomics	Gross domestic product, Economic growth, Unemployment and Inflation/ Consumption and Saving. Investment, The aggregate demand–aggregate supply model (AD-AS model), Fiscal policy, Money and Banking, Monetary Policy

5.2. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
1	Demand and Supply	2	4					6	12
2	The ownership and management of the firms: short-run costs	2	4					7	13
3	The ownership and management of the firms: long-run costs	2	4					7	13
4	Competition	2	4					8	14
5	Macroeconomics	4	8					8	20

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	Demand and Supply	Review of the lecture notes, solving of practical tasks,	Testing and quality assurance of solved practical tasks
2	The ownership and management of the firms: short-run costs	Review of the lecture notes, solving of practical tasks,	Testing and quality assurance of solved practical tasks
3	The ownership and management of the firms: long-run costs	Review of the lecture notes, solving of practical tasks,	Testing and quality assurance of solved practical tasks
4	Competition	Review of the lecture notes, solving of practical tasks,	Testing and quality assurance of solved practical tasks
5	Macroeconomics	Review of the lecture notes, solving of practical tasks,	Testing and quality assurance of solved practical tasks

7. Forms of control

7.1. Current forms of control

- written (checking of tests, lecture notes, solving of practical tasks)

A theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass/fail test,)

Stages of the interim assessment

1. Stage – TEST TO THE TOPIC 1
2. Stage - TEST TO THE TOPIC 2
3. Stage- TEST TO THE TOPIC 3
4. Stage- TEST TO THE TOPIC 4
5. Stage- TEST TO THE TOPIC 5

Questions for a pass/fail test list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1. McConnell, Campbell R. Economics : principles, problems, and policies / Campbell R. McConnell, Stanley L. Brue.– 17th ed.,876 p.

8.2. Supplementary literature

1. . Distributing health care. Economics and ethical issues [Text] / P. Dolan, J.A. Olsen. - New York : Oxford University Press, 2002. - 153 p. - References: p. 146-150. - Index: p. 151-153. - ISBN 0-19-263253-1

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
1	ShadowStats Newsletter	http://www.shadowstats.com/	"John Williams' Shadow Government Statistics" is an electronic newsletter service that exposes and analyzes flaws in current U.S. government economic data and reporting, as well as in certain private-sector numbers, and provides an assessment of underlying economic and financial conditions, net of financial-market and political hype.

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
1	https://edu.nsmu.ru	Economy. G.Sukhanov, https://edu.nsmu.ru/course/view.php?id=174	Moodle

8.5. The list of the software and information & reference systems

MS Windows Prof 7 Upgr

MS Office 2007

7-zip

AdobeReader

Kaspersky Endpoint Security

Moodle

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
1	Lecture room	NSMU	Multimedia system
2	Computer class	NSMU	Computer class with multimedia system

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A. K. Sherstennikova

June 26th 2020

SYLLABUS OF THE DISCIPLINE

Discipline **Medical Informatics**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **I / 2**

Form of the interim assessment **Pass/fail test**

Department **of Medical and Biological Physics**

Discipline workload **72** (academic hours) / **2** (credits)

Approved at the department meeting

Minutes No. 10

June 16th 2021

Head of the department



A.A. Karyakin

Authors and compilers:

Petrunicheva Oxana Zhorzhovna, Associate Professor of the Department of Medical and Biological Physics, Candidate of Pedagogical Sciences; Smertina Elena Vladimirovna, Senior Lecturer of the Department of Medical and Biological Physics, MAI (Master of Applied Informatics)

Arkhangelsk, 2021

1. Position of the course (module) within the structure of the educational program

The program is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

Block 1. Basic part.

The discipline is related to prior subjects of the curriculum: mathematics, physics

The discipline is related to subsequent subjects of the curriculum: fundamentals of research activity in medicine, evidence-based medicine

Mastering of medical informatics course is a necessary for wider use of modern information technology to improve the quality of patient care. These computers a technology helps the doctor efficiently, quickly and better organize their professional activity.

2. Goal and tasks of the mastering of the course

Medical informatics is introduced in course of education that the students have mastered the knowledge and skills in the field of modern information technologies for use in professional activity. Represented and interpreted data able to use for sciences and medical practice. Knowledge of modern computer technology able to apply in medical applications of Health. To give knowledge about methods and means of informatization of medical activities, such as information support of the doctor, medical and automated computer systems, and medical information systems.

Study of the discipline necessary to develop systematic approach to solving medical problems using information systems, ability to navigate in a variety of specialized medical information systems and their classification in order to select the least time-consuming and, at the same time, adequate application in their professional activity.

Main objectives:

- be able to organize and implement practical activities based on the use of information technology development of modern society;
- be able to provide a high level of professional activity based on modern methods of presenting information with the modern requirements information security;
- be able to make practical notes for the use of the performance;
- be find and prepare for the development of new information and techniques aimed patient management through public events by telecommunications.

3. List of the planned learning outcomes of the course (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
General professional competencies (GPC) - № 10 Able to solve standard tasks of professional activity using information, bibliographic resources, medical and biological terminology, information and communication technologies, taking into account the basic requirements of information security	AI-10.1. Is able to apply modern information and communication technologies to solve the tasks of professional activity; to carry out an effective search for information necessary to solve the tasks of professional activity using reference systems and professional databases; to use modern medical and biological terminology; to master and apply modern information and communication technologies in professional activity, taking into account the basic requirements of information security AI -10.2. He is able to use modern information and bibliographic resources, use special software and automated information systems to solve standard tasks of professional activity, taking into account the basic requirements of information security.

4. Volume of the course (module) and types of the academic classes:

Total workload of the course is 2 credits.

Type of the academic work	Total hours	Term
		2
Students' contact work with the teacher (total)	36	36
Including:		
Lectures (L)	12	12
Seminars (Sem.)		
Practical classes (PC)	24	24
Clinical practicals (CP)		
Laboratory-based practicals (LBP)		
Simulation-based practicals (SBP)		
Preparation for the examination (PE)		
Preparation for the credit (PC)		
Exam consultations (EC)		
Coursework (CW)		
Unsupervised work (UW) (total)	36	36
Examination control (EC)		
Total discipline workload	72/2	72

5. Contents of the course:

5.1. Contents of the sections of the course

No.	Name of the course section	Contents of the section
1	2	3
1	General theory of medical informatics	The concept of medical informatics. The subject and object of study in medical informatics. The main goal of medical science. The generation of computers and medical tasks that it were resolved.
2	Creation and organization of medical records for storage of medical data	Medical information systems. Classification of medical information systems. The basic concept of medical information system. The levels of medical information systems in modern health care facilities. The principle organization of automated workstation place.
3	Information modeling and analysis as a way to solve the medical tasks	The basic principles of practical work in MS-Word. Organization of data's in Microsoft Excel. Basic concepts and principles of work in spreadsheets. Construction of tables and graphs. Create the computer modules. Counting data by the formulas for analyzing in process of statistics. The basic concepts of study the principle of database. Modules of databases.
4	Computer networks as a source of quick access to a global repository of medical literature	IT services in global information network Internet. Electronic platforms which use to search medical books.

5	Information security and protection of data	Basic concept of information security. Modern ways of protection personal data
---	---	--

5.2. Sections and types of studies

No.	Name of the course section	L	P	S	CP	LBP	SBP	UW	Total hours
1	2	3	4	5	6	7		8	9
1	General theory of medical informatics	2	2					2	6
2	Creation and organization of medical records for storage of medical data	2	10					12	24
3	Information modeling and analysis as a way to solve the medical tasks	4	8					12	24
4	Computer networks as a source of quick access to a global repository of medical literature	2	2					6	10
5	Information security and protection of data	2	2					4	8

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	General theory of medical informatics	Preparation of short reviews on given topics.	Checking of written tasks or essays.
2	Creation and organization of records for storage of medical data	Solving of practical tasks.	Checking of practical tasks
3	Information modeling and analysis as a way to solve the medical tasks	Solving of practical tasks.	Checking of practical tasks
4	Computer networks as a source of quick access to a global repository of medical literature	Solving of practical tasks.	Checking of practical tasks
5	Information security and protection of data	Preparation of short reviews on given topics.	Checking of written tasks or essays.

7. Forms of control

7.1. Current forms of control

- oral (an interview, a report, defense of a project)
- written (tests, term papers, checking of lecture notes, solving of practical tasks, presentation).

A theme list of abstracts, reports, essays, review and term papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus 'Set of the evaluation tools'.

7.2. Forms of the interim assessment (pass & fail test, examination, term paper)

Stages of the examination (pass & fail test)

1. Stage - written test
(name of the stage)
2. Stage - practical task
(name of the stage)
3. Stage- computer test/oral conversation on examination question
(name of the stage)

Questions for a pass & fail test and an examination are shown at the Appendix No 4 of the syllabus 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1. **Omelchenko V.P.** Medical Informatics [Электронный ресурс] : textbook/ V. P. Omelchenko, A. A. Demidova. -Москва: ГЭОТАР-Медиа, 2020. -480 с.- URL: <https://www.studentlibrary.ru/ru/book/ISBN9785970455852.html>
2. Хай Г.А. Информатика для медиков [Текст] : учеб. пособие/ Г. А. Хай. - Санкт-Петербург: СпецЛит, 2009. -222,[1] с.
3. Хай Г.А. Информатика для медиков [Электронный ресурс] : учеб. пособие/ Г. А. Хай. -Санкт-Петербург: СпецЛит, 2009. -222,[1] с. - Режим доступа: <http://www.studmedlib.ru/>

8.2. Supplementary literature

1. Biostatistics & Medical Informatics | University of Wisconsin.
<https://www.biostat.wisc.edu/>
2. Glyanz D/ Biostatistik/ 2010 Ebook
3. International Journal of Medical Informatics. www.elsevier.com/...medical-informatics/
4. **Зарубина Т.В.** Медицинская информатика [Электронный ресурс] : учебник/ Т. В. Зарубина, Б. А. Кобринский ; ред.: Т. В. Зарубина, Б. А. Кобринский: ГЭОТАР-Медиа, 2016. -512 с.- URL: <http://www.studentlibrary.ru/book/ISBN9785970436899.html>

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
1	American College of Medical Informatics	https://en.wikipedia.org/wiki/American_College_of_Medical_Informatics	The American College of Medical Informatics (ACMI) is a college of elected fellows from the United States and abroad who have made significant and sustained contributions to the field of medical informatics.
2	Free book Medical Informatics and Bioinformatics	https://www.researchgate.net/publication/271703671_Medical_informatics_and_bioinformatics	Medical Informatics and Bioinformatics. design and implementation of the Massachusetts. General Hospital

			Utility Multi-Programming. System (MUMPS) by Barnett's group – the first. programming language and database system. tailored to healthcare.
--	--	--	---

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
1	LMS Moodle	https://edu.nsmu.ru/course/view.php?id=256	Web-support

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
1	Учебная аудитория для проведения занятий лекционного типа № 2403 Морской медицины, административный учебный корпус, 4 этаж	163000, г. Архангельск, просп. Троицкий, д. 51	<p><i>а) перечень основного оборудования:</i> Комплект учебной мебели (столы, стулья, экран, доска) рабочее место преподавателя, рабочие места для обучающихся на 300 мест.</p> <p><i>б) наборы демонстрационного оборудования</i> колонки, моноблок, проектор, экран</p> <p><i>в) перечень учебно-наглядных пособий:</i> стенды</p> <p><i>г) используемое программное обеспечение:</i> Kaspersky endpoint Security. Номер лицензии 26FE-191125-134819-1-8403. MS Office 2007. MS Win Starter 7. MS Windows Prof 7 Upgr. MS Windows Server CAL 2008 Device CAL. Номер лицензии 46850049, бессрочно Radmin Viewer 3. Radmin Server 3. Номер документа 11001793 Traffic inspector. Лицензионное соглашение № 1051-08 от 10.04.2008, бессрочно</p>
2	Компьютерный класс № 2515, административный учебный корпус, 5 этаж	163000, г. Архангельск, просп. Троицкий, д. 51	<p><i>а) перечень основного оборудования:</i> Комплект учебной мебели (столы, стулья, экран, доска) рабочее место преподавателя, рабочие места для обучающихся на 10 мест.</p> <p><i>б) наборы демонстрационного оборудования</i> Автоматизированное рабочее место (ПК в сборе+монитор+клавиатура+мышь) – 10 шт., доска 1-но элементная.</p> <p><i>в) перечень учебно-наглядных пособий:</i> Наглядные пособия, раздаточный материал к практическим занятиям по всем темам дисциплины.</p> <p><i>г) используемое программное обеспечение:</i> Kaspersky endpoint Security. Номер лицензии 26FE-191125-134819-1-8403. MS Office 2007. MS Win Starter 7. MS Windows Prof 7 Upgr. MS Windows Server CAL 2008 Device CAL. Номер лицензии 46850049, бессрочно Radmin Viewer 3. Radmin Server 3. Номер документа 11001793 Traffic inspector. Лицензионное</p>

			соглашение № 1051-08 от 10.04.2008, бессрочно
3	Компьютерный класс № 2518, административный учебный корпус, 5 этаж	163000, г. Архангельск, просп. Троицкий, д. 51	<p><i>а) перечень основного оборудования:</i> Комплект учебной мебели (столы, стулья, экран, доска) рабочее место преподавателя, рабочие места для обучающихся на 20 мест.</p> <p><i>б) наборы демонстрационного оборудования</i> Монитор «Acer» - 4 шт., монитор Samsung – 8 шт., мышь д/компьютера – 12 шт., системный блок- 12 шт., телевизор</p> <p><i>в) перечень учебно-наглядных пособий:</i> Наглядные пособия, раздаточный материал к практическим занятиям по всем темам дисциплины.</p> <p><i>г) используемое программное обеспечение:</i> Kaspersky endpoint Security. Номер лицензии 26FE-191125-134819-1-8403. MS Office 2007. MS Win Starter 7. MS Windows Prof 7 Upgr. MS Windows Server CAL 2008 Device CAL. Номер лицензии 46850049, бессрочно Radmin Viewer 3. Radmin Server 3. Номер документа 11001793 Traffic inspector. Лицензионное соглашение № 1051-08 от 10.04.2008, бессрочно</p>

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **Chemistry**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1 / 2**

Form of the interim assessment **Pass/fail test**

Department **of the general and bioorganic chemistry**

Discipline workload **108** (academic hours) / **3** (credits)

Approved at the department meeting

Minutes No.

June 8th 2021

Head of the department



E.A. Ayvazova

Author and compiler:

Zubova Natalya Alexandrovna, Ph. D., Senior lecturer

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the Basic part of the curriculum (or to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects)

The discipline is related to prior subjects of the curriculum: physics, mathematics, biology.

The discipline is related to subsequent subjects of the curriculum: normal physiology, physiology of the maxillofacial region; pathophysiology, pathophysiology of the head and neck; biological chemistry, biochemistry of the oral cavity.

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive/diagnostic/organizational and administrative /research

2. Goal and tasks of the mastering of the discipline

The purpose - formation of system knowledge of a subject, the skills necessary for further studying of biological and medical disciplines.

Tasks of discipline:

to provide general-theoretical chemical training of the doctor, assimilation of the fundamental ideas, concepts, laws, theories necessary for studying of other chemical and professional disciplines;

- to create chemical knowledge and abilities of students as a basis of future successful profession of a physician;

- to show interrelation of chemistry with biological and medical disciplines;

- to form natural-science thinking of experts of a medical profile.

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
Глава 1 УК-1 Способен осуществлять критический анализ проблемных ситуаций на основе системного подхода, вырабатывать стратегию действий.	Глава 2 ИД-1.1 Осуществляет критический анализ информации на основе системного подхода ИД-1.2. Идентифицирует проблемные ситуации на основе критического анализа ИД-1.3. Разрабатывает стратегию действий для решения проблемных ситуаций на основе системного и междисциплинарного подходов.
Глава 3 ОПК-10 Способен решать стандартные задачи профессиональной деятельности с использованием информационных, библиографических ресурсов, медико-биологической терминологии, информационно-коммуникационных технологий с учетом основных требований информационной безопасности.	Глава 4 ИД-1. Умеет применять современные информационно-коммуникационные технологии для решения задач профессиональной деятельности; осуществлять эффективный поиск информации, необходимой для решения задач профессиональной деятельности с использованием справочных систем и профессиональных баз данных; пользоваться современной медико-биологической терминологией; осваивать и применять

	современные информационно-коммуникационные технологии в профессиональной деятельности с учетом основных требований информационной безопасности ИД-2. Умеет использовать современные информационные и библиографические ресурсы, применять специальное программное обеспечение и автоматизированные информационные системы для решения стандартных задач профессиональной деятельности с учетом основных требований информационной безопасности.
--	---

*The list of professional competencies is based on the requirements of the professional standard "General medicine (district physician)", approved by the order of the Ministry of Labor and Social Protection of the Russian Federation of March 21, 2017 No. 293n

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 3 credits.

Type of the academic work	Total hours	Term
		2
Students' contact work with the teacher (total)	54	54
Including:		
Lectures (L)	18	18
Seminars (Sem.)		
Practical classes (PC)	18	18
Clinical practicals (CP)		
Laboratory-based practicals (LBP)	18	18
Simulation-based practicals (SBP)		
Preparation for the examination (PE)		
Preparation for the credit (PC)		
Exam consultations (EC)		
Coursework (CW)		
Unsupervised work (UW) (total)	54	54
Examination control (EC)		
Total discipline workload	108/3	108

5. Course content:

5.1. Contents of the sections of the course

№	Name of the course section	Contents of the section
1	Introduction. Atom structure. Chemical bond.	Value of chemistry in biology and medicine. Quantum-mechanical model of atom. Electronic cloud. Nuclear orbital. The characteristic of a power condition of an electron in atom system of quantum numbers: main (n), orbital (l), magnetic (m) and spin (s) quantum numbers. Multielectronic atoms. Paulie's principle. The maximum number of electrons on orbitals, subtotals and levels. Principle of a minimum of energy. Sequence of filling with electrons of nuclear orbitals. Electronic formulas s-, p-, d-elements. Filling with

		<p>electrons of nuclear orbitals of one subtotal – Hund's rule. Electronic and graphic formulas (spin schemes) of elements.</p> <p>Communication between an electronic structure of atoms and the provision of elements in periodic system: s-, p-, d-, f-families of elements. Radiuses of atoms.</p> <p>Mechanism and ways of formation of a covalent chemical bond. Communication length. Binding energy. Orientation of a chemical bond. σ- and π-связь. Hybridization of nuclear orbitals of atoms of Vn, In, With on the example of formation of molecules of Vn_2, BH_3, CH_4.</p> <p>Ionic communication as extremely polarized covalent communication. Oxidation level of atoms. Gomo- and heterolytic rupture of communication. Types of covalent molecules. The factors defining polarity of molecules. Dipolar moment of molecules.</p>
2	Chemical thermodynamics .	<p>Concept about thermodynamic system. The systems isolated, closed, opened. Parameters of system: intensive, extensive. Concept of thermodynamic process; classification of processes. Thermodynamic concepts of warmth, work of system. Internal energy - function of a condition of system. Formulation of the I beginning of thermodynamics. Thermochemistry. Thermal effect of chemical reaction (reaction enthalpy). Hess's law and consequences from it, their application in thermodynamic calculations.</p> <p>Isobaric and isothermal potential. II beginning of thermodynamics; its application to chemical reactions. Use of thermodynamic functions for definition of chemical characteristics of substance.</p>
3	Chemical kinetics. Catalysis. Chemical balance	<p>The law of the operating masses. Reversible and irreversible chemical reactions. Constant of chemical balance. Le Chatelie's principle – Brown.</p> <p>Catalysis and catalysts. Theories of a homogeneous and heterogeneous catalysis. Biocatalysts. Features of biocatalytic processes. A catalysis role in activity of an organism.</p>
4	Solutions of electrolytes. Strong and weak electrolytes. Colligative properties of solutions.	<p>Main definitions: solution, solvent, the dissolved substance. Solubility. Water as one of the most widespread solvents. A role of water solutions in activity of organisms.</p> <p>Concept kolligativnykh properties of solutions. The law of Guys – Goffa about osmotic pressure. An osmosis role in biosystems. Plazmoliz, turgor. Hypo - from - and hypertensive solutions.</p> <p>Theory of solutions of strong electrolytes. Ionic force of solutions, coefficient of activity and activity of ions.</p> <p>Ionic work of water. Hydrogen pH indicator solutions of strong acids and bases.</p> <p>Solutions of weak electrolytes. Constant of ionization (dissociation).</p>
6	Buffer systems.	<p>Buffer solutions. Their classification. pH buffer systems. Genderson's equation – Gasselbakh for acid and main buffers. Mechanism of action of buffer systems. Buffer capacity. Buffer systems in chemical practice and in live organisms, their biological value.</p>
7	Carbohydrates: monosaccharides, bioses, polysaccharides.	<p>Monosaccharides, their classification. Stereoisomerism of monosaccharides; D - and L-stereochemical ranks. Open and cyclic (piranozny, furanozny) forms, their interconversions in solution; α - and β - anomer. Fischer and Heuors's formulas. Tsiklooksotautomeriya; mutarotation. Chemical properties of</p>

		<p>monosaccharides. Oxidation-reduction reactions of monosaccharides. Value of these reactions.</p> <p>About - and gligozida N-. Their education (reaction mechanism) and hydrolysis; biological role. Reaction of phosphorylation of monosaccharides and its biological value. Oligosaccharides; Bioses, their structure, tsiklooksotautomeriya. The restoring and not restoring bioses, examples. Hydrolysis of bioses. Biological functions. Polysaccharides; classification of polysaccharides. Gomopolisakharida: starch, glycogen. Structure, hydrolysis, biological role. Heteropolysaccharides. Representatives of heteropolysaccharides: hyaluronic acid, heparin. A structure, a biological role in an organism.</p>
8	Amino acids and proteins. Structure, properties.	<p>Structure and stereoisomerism α - the amino acids which are a part of proteins. Replaceable and irreplaceable amino acids. Classification taking into account the chemical nature of the radical and its ability to interact with water. Acid and main properties of amino acids. Isoelectric point of neutral, sour and main amino acids. Chemical properties α - amino acids as heterofunctional connections: formation of intra complex salts, reactions of an eterifikation. Interaction with nitrogenous acid and formaldehyde. Biologically important reactions of amino acids. Formation of amino acids as a result of recovery amination and reaction of transamination. Deamination reactions (oxidizing and not oxidizing), decarboxylations. Conditions of their course in an organism.</p> <p>Polypeptides and proteins. Education, hydrolysis (partial and full). Electronic and spatial structure of peptide group. Primary structure of peptides and proteins, methods of its definition Secondary structure of proteins (α-spiral and β-folded structure); stabilization in space. Tertiary structure of proteins; the interactions stabilizing tertiary structure.</p> <p>Structure, biological role in an organism.</p>
9	Nucleinic acids. Nucleotide coenzymes.	<p>Structural components of nucleinic acids: nucleinic bases (pirimidinovy and purinovy), pentoza, phosphoric acid. Laktim-laktamny tautomeriya of the nitrogenous bases. Nucleosides, nucleotides, nature of communication between their structural components; hydrolysis. Biological functions of nucleotides (ATP, OVER). Primary and secondary structures of nucleinic acids, their nucleotide structure. The interactions stabilizing secondary structure of DNA. Biological role of DNA and RNA.</p>
10	Lipids. Low-molecular regulators .	<p>General idea about lipids. Classification of lipids. Structural components of lipids – fatty highest acids; their structure and properties. Triatsilglitserina; structure, structure, properties (hydrolysis, reactions of accession, oxidation), biological role. Glitserofosfolipida, their structure, structure, hydrolysis, biological role.</p> <p>Connections of the steroid nature: cholesterol, steroid hormones, bilious acids. Idea of a chemical structure and biological role.</p>

5.2. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
-----	----------------------------	---	---	---	----	-----	-----	----	-------------

1	Atom structure. Chemical bond	2		2				6	10
2	Chemical thermodynamics	2		2				6	8
3	Chemical kinetics. Catalysis.	2		6				4	12
4	Solutions of electrolytes. Strong and slabye elektrolita. Buffer systems.	2		4				4	10
5	Colligativy properties of solutions.	2		4				4	10
6	Nomenclature of organic compounds. Spatial structure of organic compounds. Acid and main properties of organic compounds.	-		2				6	8
7	Carbohydrates: monosaccharides, bioses, polysaccharides	2		6				8	16
8	Amino acids and proteins. Structure, properties	2		4				6	12
9	Nucleic acids	2		2				6	10
10	Lipids. Low-molecular regulators	2		4				4	10

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	Atom structure. Chemical bond	Performance of homeworks. DES Moodle http://edu.nsmu.ru/course/view.php?id=621	Examination check
2	Chemical thermodynamics. Chemical kinetics. Catalysis. Chemical balance		
3	Solutions of electrolytes. Strong and weak electrolytes. Kolligativny properties of solutions. Buffer systems.	Performance of homeworks. DES Moodle http://edu.nsmu.ru/course/view.php?id=621	Examination check
4	Main classes of biopolymers	Performance of homeworks, drawing up the report of the performed laboratory works DES Moodle http://edu.nsmu.ru/course/view.php?id=621	Messages on occupations, performance of laboratory works, check of examinations

7. Forms of control

7.1. Current forms of control

- oral (an interview, a report, a colloquium, presentations of projects)
- written (checking of tests, review papers, essays, abstracts, lecture notes, solving of practical tasks, preparation of a case history).

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass/fail test, examination, term paper)

Stages of the interim assessment

Stages of examination (pass/fail test)

1. Stage - ____ final test ____
(name of the stage)

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1. Glinka N. L. General chemistry [Text]: studies. for higher education institutions / N. L. Glinka; edition: V. A. Popkov, A. V. Babkov. - the 18th prod., additional and reslave. - Moscow: Юрайт, 2011.-886 pages.
2. Yershov Ю.А.Общая chemistry / Yershov YU.A. - M.: The higher school, 2004.
3. Slesarev V. I. Fundamentals of chemistry live / Slesarev V. I. - SPb: Himizdat, 2008.
4. Glinka N. L. General chemistry / Glinka of N. L. - M.: Integral press, 2008.

8.2. Supplementary literature

1. Kireev V. V. Short course of physical chemistry. M.: Chemistry, 2005.
2. Kalas V., Pavlichek Z. Biofizicheskaya chemistry. M.: Мир, 2004.
3. Pisarenko A.P., etc. Course of colloidal chemistry. M.: The higher school, 2008.
4. Otto. M. Modern methods of analytical chemistry. The translation from German under the editorship of A. V. Garmash. - M of a.:tekhnosfer, 2006. – 543 pages.

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
1	Zholnin A. V. General chemistry [An electronic resource]: studies. for medical higher education institutions / A. V. Zholnin; under the editorship of V. A. Popkov, A.V. Zholin. - Moscow: GEOTAR-media, 2012.-399 pages: silt.	http://www.studmedlib.ru/	
2	Chemistry. Part I. General chemistry [An electronic resource]: methodical recommendations / E. A. Ayvazova, E. A. Zhuravlev [etc.]. - Arkhangelsk: Publishing house of Northern state medical university, 2015. - 84 pages.	http://lib.nsmu.ru/lib/readers/elektronnaya-biblioteka.php	
3	Puzakov S. A Chemistry [An electronic	http://www.studmedlib.ru/	

	resource]: textbook / Page. And Puzakov. - the 2nd prod., испр. and additional. - Moscow: GEOTAR-media, 2006.-640 pages - the access Mode: http://www.studmedlib.ru/ .	b.ru/	
--	--	---	--

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
	<i>Moodle</i>	Anokhina N. A. Ph. D., associate Professor, T. Korelskaya A. Ph. D., associate Professor, Zubova N. A. Ph. D., senior lecturer. https://edu.nsmu.ru/course/view.php?id=621	Mixed learning + EC

8.5. The list of the software and information & reference systems

MSWindowsVistaStarter,
MSWindowsProf 7 Upgr;
офисный пакет
MS Office 2007, 2010 (Excel, Word, Outlook, Power Point)
другое ПО -
Google Docs, Google Диск
Zoom
LMS MOODLE
7-zip
AdobeReader

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
1	Specialized chemical laboratory	Prospekt Troitskiy 51 1449, 1451, 1453	Set of chemical ware and reactants, scales technical, electronic, analytical, the projective equipment for demonstration of lectures, computers for use of computer programs of control of knowledge of students. A multimedia projector (for the presentation of lectures). A set of ware and chemical reactants for all laboratory works. Scales: technical, electronic. Set

			sharosterzhnevykh of models of molecules. Tables, schemes and drawings on subjects.
--	--	--	---

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **Biology**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **I / 1,2**

Form of the interim assessment **Examination**

Department **of medical biology and genetics**

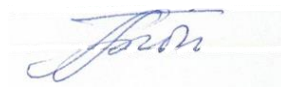
Discipline workload **216** (academic hours) / **6** (credits)

Approved at the department meeting

Minutes No. 10

June 14th 2021

Head of the department



N.A. Bebyakova

Author and compiler:

Kurochkina E.L. - Candidate of Biological Science, Associate professor of
Department of Medical Biology and Genetics.

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the Basic part of the curriculum

The discipline is related to prior subjects of the curriculum: -

The discipline is related to subsequent subjects of the curriculum: Microbiology, Medical genetics, Infection diseases.

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive, diagnostic and research.

2. Goal and tasks of the mastering of the discipline

Biology course provides specialist training, which owns the following types of professional activity: a preventive, diagnostic, research. It is necessary to form a clinical judgment of future doctors in the examination of biological laws of human life, given its specific characteristics of the morphological and functional organization of the genetic apparatus.

To form an ecological thinking which is based on the knowledge of the general laws of human relationships with nature. Establish an active role in solving the problems of the human gene pool, increasing life expectancy in modern conditions and the preservation of life on Earth.

Tasks:

1. The study of the fundamental properties of living at all levels of organization of life from the perspective of an evolutionary approach
2. The study of the biological bases of human life of the organism (ontogeny, heredity, variability, reproduction) with a view to distinguishing normal and pathological development.
3. Study of the relationship of organisms with their environment at the individual level, populations, ecological communities, the biosphere as the basis of human ecology.
4. The study of human relationships with the environment, including:
 - a) parasitism as an ecological phenomenon, structural features and life cycles of parasites, as the basis for the formation of ideas about environmental diseases.
 - b) the influence of abiotic environmental factors on the human body as the basis of formation of representations about the environmental variability and adaptive types of people.

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement (I)
General professional competencies (GPC) - № 5 Ability to evaluate morphofunctional, physiological states and pathological processes in the human body for solving professional tasks	I – 5.1. knows the anatomy, histology, topographic anatomy and physiology of human organs and systems I – 5.2. determine and evaluate morphofunctional, physiological states and pathological processes in the human body
General professional competencies (GPC) - № 10 Ability to solve standard tasks of professional activity using information, bibliographic resources, medical and biological terminology, information and communication technologies, taking into account the requirements of information security.	I – 10.1 use modern information and communication technologies to solve the problems of professional activity; to carry out an effective search for information necessary to solve the problems of professional activity using reference systems and professional databases; to use modern terminology; to master and apply modern information and

	communication technologies in professional activity, taking into account the basic requirements of information security I – 10.2. use modern information and bibliographic resources, use special software and automated information systems to solve standard tasks of professional activity, taking into account the basic security requirements
--	---

*The list of professional competencies is based on the requirements of the professional standard "General medicine (district physician)", approved by the order of the Ministry of Labor and Social Protection of the Russian Federation of March 21, 2017 No. 293n

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is _6_ credits.

Type of the academic work	Total hours	Term	
		1	2
Students' contact work with the teacher (total)	92,3	40	52,3
Including:			
Lectures (L)	30	14	16
Seminars (Sem.)	4	2	2
Practical classes (PC)	54	24	30
Clinical practicals (CP)			
Laboratory-based practicals (LBP)	2		2
Simulation-based practicals (SBP)			
Preparation for the examination (PE)	0,3		0,3
Preparation for the credit (PC)			
Exam consultations (EC)	2		2
Coursework (CW)			
Unsupervised work (UW) (total)	90	68	22
Examination control (EC)	33,7		33,7
Total discipline workload	216/6	108	72

5. Course content:

5.1. Contents of the sections of the course

No	Name of the course section	Content of the section
I.	GENETICS	
	<u>Topic 1. CELL BIOLOGY</u>	Structural-functional organization of molecular-genetic and cell levels. Levels of living matter organization. Optic systems in biological investigations and its usage. Cell morphophysiology. Cell structure and functions. Procariotic and eucariotic cells. Structural-functional organization of molecular-genetic and cell levels. Cell as an elementary life unit. Cell cycle and its stages Mitosis and its main phases. Mitotic activity. Mitotic activity regulation. Theoretical and practical mitosis study significance. Amitosis. Endomytosis. Stages of the cell metabolism.

	<u>Topic 2. MOLECULAR BASIS OF HEREDITY</u>	Information flow organization in cell The genetic processes and nucleic acids studying history. Nucleic acids biological role. DNA, structure features and function. The repair process. The biological code: its essence and main peculiarities. The replication process stages. The replicon as the replication unit. The RNA features in comparison with DNA. The RNA main kinds and their characteristics. The genetic apparatus of the eukaryotes. The study of morphology and molecular organization of chromosomes.
	<u>Topic 3. REPRODUCTION</u>	Reproduction. The conjugation as the genetic information transmission way and as the sex process. Ontogenesis: stages, regularities of the embryonic period. Acquaintance with the periodization of ontogenesis. The study of the stages of embryonic development, the peculiarities of their flow of different organisms. The study of morphological the morula stage, blastula, gastrula, organo - and histo Genesis of amphibians in microslides. The study of the morphology of improvised bodies in vertebrates and human microslides.
	<u>Topic 4. GENETICS</u>	Study the forms of interaction of allelic genes. Situational tasks on modeling laws, Mendel and interaction of allelic genes. incomplete dominance The inheritance of ABO group. Pleyothropy. Interaction of non-allelic genes. Study the forms of non-allelic genes interaction. Complementary, epistasis, polymery. Situational tasks on modeling of monogenic and polygenic traits and non-allelic genes interaction Linked inheritance. Determination of the distance between genes and preparation of chromosomal genetic maps using crossover. A study of patterns of inheritance sex-linked traits.
	<u>Topic 5. VARIABILITY</u>	Variability, its forms and expression on organismic level: genotypic and phenotypic variability. Phenotypic variability. Norm of reaction. Importance of environment for expression and penetration of genes. Phenocopy. Combinative variability, its importance in maintenance of genotypic variety of individuals in populations. Definition and classification of mutations. Gene mutations. Types of chromosomal and genome mutations. Chromosomal syndromes.
	<u>Topic 6. HUMAN GENETICS</u>	Study of human heredity. Man as a subject of genetics. Acquaintance with the basic methods of human genetics, their stages and purpose. Bases of medical genetics. Methods of the human genetics. Genealogic, study of twin, cytogenetics, hybridizations of somatic cells, biochemical, immunological, dermatoglyphics, population-statistical methods . Clinic-genealogical analysis. The calculation of the degree of genetic risk. Assessment of the relative importance of the environment and genetic factors. Situational tasks, medico-genetic consulting legends.
II.	MEDICAL	

	PARASITOLOGY	
	<u>Topic 1. MEDICAL PROTOZOOLOGY</u>	Parasitic Protozoa. Class Animal Parasites. Acquaintance with the peculiarities of the structure, activity, systematics of Protozoa. Subkingdom Protozoa. Type Sarcomastigophora. Class Zoomastigophorea. Study of the peculiarities of the structure and life cycles of trypanosome, leishmania, Giardia, Trichomonas.
	<u>Topic 2. MEDICAL HELMINTOLOGY</u>	Medical helminthology. Phylum Plathelminthes. Class Trematoda. Characteristic of class. Species Fasciola hepatica, Opisthorhis felinus, Dicrocoelium lanceatum. Chinese liver Fluke (Clonorchis sinensis), Pulmonary Elukes (Paragonimus ringeri), Schistosomes (Schistosoma haematobium, Schistosoma mansoni, Schistosoma japonicum). Morphology, life cycle, entry of infection, pathogenic effect, laboratory diagnosis, preventive measures. Phylum Plathelminthes. Class Cestoidea. Description of class. Exciters of cestodosis: Pork tapeworm (Taenia solium), Beef tapeworm (Taeniaraehynchus saginatus), Dwarf tapeworm (Hymenolepis nana). Morphology, cycle of development, ways of infection, pathogenic influencing, methods of laboratory diagnostics and preventive measures. Phylum Plathelminthes. Class Cestoidea. Broad tapeworm or Fish tapeworm (Diphyllobothrium latum). Alveococcosis (Alveococcus multilocularis), Hydatidosis (Echinococcus granulosus), Morphology, cycle of development, ways of infection, pathogenic influencing, methods of laboratory diagnostics. Phylum Nematelminthes. Class Nematoda. Geohelminths. Biohelminths. Causative of nematodosis: Ascariasis (Ascaris lumbricoides), trichocephaliasis (Trichocephalus trichiurus), Ancylostomiasis (Ancylostoma duodenale), Necatoriasis (Necator americanus). Morphology, cycle of development, ways of infection, pathogenic, laboratory diagnostics. Methods of laboratory diagnostics of Helminths
	<u>Topic 3. MEDICAL ARACHNOENTOMOLOGY</u>	Medical arachnoentomology. Phylum Arthropoda. Class Crustacea. Class Arachnoidea. Description, classification, medical value. Ticks are vector of illnesses, carry and natural reservoirs of diseases. Itch mite (Sarcoptes of scabiei), Demodex folliculorum. Ixodidae: taiga tick (Ixodes persulcatus), dog tick (Ixodes ricinus). Argasidae: Ornithodoros papillipes. Morphological features, cycles of development, methods of control against ticks that prophylaxis of bites. Ticks which have transmission importance of illnesses. Ticks are inhabitants of habitation of people and their medical value. Class Insecta. Order lice (Anoplura). Species: Head louse (Pediculus capitis), Body louse (P. vestimenti; P.corporus), Pubic louse (Phthirus pubis). Order fleas (Aphaniptera). Species: Human flea (Pulex irritans), Rat flea (Xenopsylla cheopis). Order Bugs (Heteroptera). Species : Cimex lectularius, Triatoma infestans. Order Blattoidea. Species:

		Blatta orientalis, Blattella germanica . Order Diptera. Mosquito: tribes Culex, Anopheles, Aedes. Fly: Wohlfartia fly (Wohlfahrtia magmfican). Mosquitos: Genus Phlebotomus.
	Topic 4. Evolution and human ecology	Evolution The synthetic theory of evolution. A genofond of species. Ideal and real populations. The theory of evolution. Biological species, its criteria. Characteristics of a population (morphological, ecological, genetic). Elementary evolutionary factors. Interaction and their role in occurrence and fastening of changes of genetic structure of populations. Drift of genes. Hardy - Weinberg law. Use of the law of Hardy - Weinberg for definition of genetic structure of real populations and populations of people. Human ecology. Adaptation of an organism to a living environment and an origin of biological expediency.

5.2. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
1	CELL BIOLOGY	2		4				4	10
2	MOLECULAR BASIS OF HEREDITY	4		8				15	27
3	REPRODUCTION	4	2	2				4	12
4	GENETICS	2		8				15	25
5	VARIABILITY	4		4				15	23
6	HUMAN GENETICS	2	2	4				15	23
7	MEDICAL PROTOZOOLOGY	4		6				4	14
8	MEDICAL HELMINTOLOGY	4		10		2		10	26
9	MEDICAL ARACHNOENTOMOLOGY	2		8				4	14
10	Evolution and human ecology	2						4	6

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	CELL BIOLOGY	working with scientific and educational literature	Abstract in the work-book
2	MOLECULAR BASIS OF HEREDITY	solving the genetic tasks and genetic problems	Abstract in the work-book
3	REPRODUCTION	working with scientific and educational literature	Abstract in the work-book
4	GENETICS	solving the genetic tasks and genetic problems	Abstract in the work-book

5	VARIABILITY	solving the genetic tasks and genetic problems	Abstract in the work-book
6	HUMAN GENETICS	solving the genetic tasks and genetic problems	Abstract in the work-book
7	MEDICAL PROTOZOOLOGY	working with scientific and educational literature	Abstract in the work-book
8	MEDICAL HELMINTOLOGY	working with scientific and educational literature	Abstract in the work-book
9	MEDICAL ARACHNOENTOMOLOGY	working with scientific and educational literature	Abstract in the work-book

7. Forms of control

7.1. Current forms of control

- oral (a report, a colloquium, presentations of projects)
- written (checking of tests, review papers, lecture notes, solving of practical tasks).

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment - examination

Stages of the interim assessment

Stages of examination

1. Stage - theoretical part (The stage is conducted in writing form. Exam paper includes two questions.

2. Stage – practical part (Solve the 1 genetic task)

Questions for examination and list of genetic tasks are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1. **Биология** [Электронный ресурс] : учебник: в 2т./ ред. В. Н. Ярыгин Т.1. -Москва: ГЭОТАР-Медиа, 2018. -728 с.: ил. - URL: <http://www.studentlibrary.ru/book/ISBN9785970445686.html>.
2. **Биология** [Электронный ресурс] : учебник: в 2т./ ред. В. Н. Ярыгин Т.2. -Москва: ГЭОТАР-Медиа, 2018. -560 с.: ил. - URL: <http://www.studentlibrary.ru/book/ISBN9785970435656.html>.

8.2. Supplementary literature

1. **Faller A.** The Human Body: An Introduction to Structure and Function. [Электронный ресурс]/ A. Faller, M. Schunke. -1st ed.: Thieme, 2004 - URL: https://medone-education.thieme.com/ebooks/2151115?fromSearch=true#/ebook_2151115_SL82017017.
2. **Биология. Руководство к лабораторным занятиям** [Электронный ресурс] : учебно-методическое пособие/ ред. Н. В. Чебышев. -2-е изд., испр. и доп.. -Москва: ГЭОТАР-Медиа, 2015. -384 с.: ил. - URL: <http://www.studmedlib.ru/book/ISBN9785970434116.html>.
3. **Биология: руководство к лабораторным занятиям** [Электронный ресурс] : учебное пособие/ ред. О. Б. Гигани. -Москва: ГЭОТАР-Медиа, 2016. -272 с.: ил. - URL: <http://www.studmedlib.ru/book/ISBN9785970421383.html>.

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
---	-----------	-------------	---------------------

1	Medicalplanet	http://medicalplanet.su/genetica	contain scientific and educational information on various sections of genetics
2	Biology and medicine	http://medbiol.ru	contain scientific and educational information on various sections of biology

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
	Moodle	https://edu.nsmu.ru/course/view.php?id=595	mixed

8.5. The list of the software and information & reference systems

When implementing the educational process, students and teaching staff use the following software: operating system-MSWindowsVistaStarter,MSWindowsProf 7 Upgr; office package-MSOffice 2007; other software-7-zip, AdobeReader,Kaspersky Sendpointsecurity

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
	Room №1213, 1215, 1242	Troicky pr., 51	Student microscopes systems "Biolam", HSP -102V Overhead projector to show slides TV for viewing the video

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **Human anatomy**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1,2 / 1,2,3**

Form of the interim assessment **Examination**

Department **of Human anatomy and operative surgery**

Discipline workload **504** (academic hours) / **14** (credits)

Approved at the department meeting

Minutes No.

June 15th 2021

Head of the department



Sukhanov S. G.

Author and compiler:

Ph. D., associate Professor M. N. Alikberova

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

Following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine». The discipline "Anatomy" refers to the cycle of mathematical and natural sciences.

Basic knowledge necessary for studying the discipline form:

- in the cycle of humanitarian and socio-economic disciplines, including: philosophy, bioethics, psychology and pedagogy, history of medicine, latin language;
- in the cycle of mathematical and natural-science disciplines, including: physics, mathematics; chemistry; biology; histology, embryology, cytology; normal physiology.

It is preceded by studying next disciplines: normal physiology; topographical anatomy and operative surgery; pathological anatomy, clinical pathological anatomy, clinical subjects.

2. Goal and tasks of the mastering of the discipline

Goal - formation of students' knowledge of human anatomy and topographic anatomy of how the whole organism and individual organs and systems, based on the latest achievements of macro and microscopy; Ability to use the knowledge gained in the subsequent study of other basic and clinical disciplines, as well as in the future professional activity of a doctor.

Tasks:

- studies structure, functions and the topography of the human body, anatomical and topographical relationships of their X-ray image, the individual features of the structure and age of the body, including prenatal development (organogenesis), variants of variability individual organs and defects of development;
- formation of students' knowledge of the interdependence and unity of the structure and function of individual organs and body as a whole, the relationship of the organism to changing environmental conditions, the impact of environmental and genetic factors, the nature of work, occupation, physical culture and social conditions for the development and the structure of the body;
- formation of students' comprehensive approach to the study of anatomy and topography of the organs and systems; synthetic understanding of the structure of the human body as a whole as the relationship of body parts; ideas about the importance of fundamental research anatomical science to applied and theoretical medicine;
- formation of students' ability to navigate the complex structure of the human body, accurately and precisely identify and define the location and the projection of bodies and their parts on the surface of the body, ie, possession "anatomical material" for understanding the pathology, diagnosis and treatment;
- education of students, guided by traditional principles of humanism and mercy, respectful and careful attitude to the studied object - the human body organs, the carcass; instilling high moral standards of behavior in the sectional rooms of the medical school.

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
ОПК-№5 Способен оценивать морфофункциональные, физиологические состояния и патологические процессы в организме человека для решения профессиональных задач	ИД-1. Знает анатомию, гистологию, топографическую анатомию, физиологию, патологическую анатомию и физиологию органов и систем человека ИД-2. Умеет определять и оценивать морфофункциональные, физиологические состояния и патологические процессы в организме человека

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 14 credits.

Type of the academic work	Total hours	Term		
		1	2	3
Students'contact work with the teacher (total)	236,3	44	96	96,3
Including:				
Lectures (L)	78	8	36	34
Seminars (Sem.)				
Practical classes (PC)	156	36	60	60
Clinical practicals (CP)				
Laboratory-based practicals (LBP)				
Simulation-based practicals (SBP)				
Preparation for the examination (PE)				0,3
Preparation for the credit (PC)				
Exam consultations (EC)				2
Coursework (CW)				
Unsupervised work (UW) (total)	234	64	156	14
Examination control (EC)	36			33,7
Total discipline workload	504/14	108	252	144

5. Course content:

5.1. Contents of the sections of the course

No	Name of the course section	Content of the section
1	2	3
1.	Introduction. Musculoskeletal system.	Content of the object. The history of anatomy. History of domestic anatomy. Human development. The general structure of the human body. The concept of organs and organ systems. The position of man in nature. Anatomical Terminology. Osteology: the bones of the axial skeleton, skeleton limbs, skull. Arthrology: Connect the trunk bones and skull, limbs connection. Myology: muscles and fascia of the trunk, chest, abdomen, extremities, head and neck.
2.	Splanhnologiya. Organs of the immune system. Endocrine glands.	Digestive system. Respiratory system. Urinary system. Reproductive system. The general laws of the structure. Primary and secondary immune organs. The lymph nodes. The pituitary, pineal, thyroid, parathyroid, adrenal gland, endocrine pancreas, and gonads.
3.	Cardiovascular system	Heart. The arteries of the pulmonary circulation. The arteries of the systemic circulation: arterial trunk and extremities. Vens. Lymphatic vessels, trunks and ducts. Way lymph drainage.
4.	Neurology	The general structure. Central nervous system. Spinal cord. The brain: telencephalon, cerebral hemisphere. The brain stem. Diencephalon. Midbrain. Isthmus hindbrain. The hindbrain. The bridge, cerebellum, medulla oblongata, rhomboid fossa. Pathways of the central nervous system. Skins spinal cord and brain. The peripheral nervous system. Spinal nerves. Brachial, lumbar and sacral plexus. The autonomic nervous system: sympathetic and parasympathetic parts.
5.	Esthesiology	The eye, the ear, the organs of smell and taste. Skin.

5.2. Sections and types of studies

No	Name of the course section	L	P	S	LBP	CP	UW	Total hours
1	2	3	4	5	6	7	8	9
1.	Introduction. Musculoskeletal system.	8	36				64	78
2.	Splanhnology. Organs of the immune system. Endocrine glands.	18	27				65	110
3.	Cardiovascular system	10	18				55	83
4.	Neurology	38	56				40	134
5.	Esthesiology	2	6				10	18

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No	Name of the course section	Types of unsupervised work	Forms of control
	Introduction. Musculoskeletal system.	The study of the bones, joints and muscles; Training programs in electronic form	Oral questioning, testing
	Splanhnologiya. Organs of the immune system. Endocrine glands.	Study prepares of internal organs; Preparation of presentations on the topics in this section; Working with textbooks; Training programs in electronic form	Oral questioning, testing
	Cardiovascular system	The study of heart and vessels on the prepares; Decision of situational problems self Training schemes and drawings on the themes; Training programs in electronic form	Oral questioning, testing
	Neurology	The study the prepares; Training schemes and drawings on the themes; Filling the training tables; Decision of situational problems self ; Training programs in electronic form Training schemes and drawings on the themes; Training programs in electronic form	Oral questioning, testing
	Esthesiology	Working with textbooks; Filling the training tables	Oral questioning, testing

7. Forms of control

7.1. Current forms of control

- oral (an interview, a report, a colloquium, presentations of projects)
- written (checking of tests, review papers, essays, abstracts, lecture notes, solving of practical tasks, preparation of a case history).

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass/fail test, examination, term paper)

Stages of the interim assessment

Stages of examination (pass/fail test)

1. Stage - testing
(name of the stage)
2. Stage - Name and show
(name of the stage)
3. Stage - Interview stage – examination paper
(name of the stage)

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1.	Chaurasia's B. D. Human Anatomy. Regional and Applied. Dissection and Clinical. Volume 2: tutorial/ B. D. Chaurasia's. -6 th ed.. -New Delhi, 2013. - 463 p.
2.	Abrahams P.H. McMinn's Colour Atlas of Human Anatomy/ P.H. Abrahams, S.C. Marks Jr, R.T. Hutchings. -6th ed.. -Edinburgh; London; New York: MOSBY, 2003. -378 p.: il
3.	Prives M. . Human anatomy/ M. Prives, N. Lysenkov , V. Bushkovich Prives M. Vol. II : The science of the vessels. The science of the nervous system. The science of the sensory organs./ пер. A. Aksenov. -Moscow: Mir Publishers, 2004. -439,[1] p.: il.
4.	Prives M. . Human anatomy/ M. Prives, N. Lysenkov , V. Bushkovich Vol. 1 : The weight-bearing and locomotor system. The science of the viscera. The science of the organs of internal secretion. -2006. -608 p.
5.	Prives M.. Anatomy/ M. Prives, N. Lysenkov, V. Bushkovich Vol. 2 : The science of the vessels. The science of the nervous system. The science of the sensory organs. -1985. - 439 p.: il
6.	Prives M.. Anatomy/ M. Prives, N. Lysenkov, V. Bushkovich Vol. 1 : The weight-bearing and locomotive system. The science of the viscera. The science of the organs of internal secretion. -1985. -608 p.: il
7.	Prives. M.. Human anatomy/ M. Prives, N. Lysenkov, V. Bushkovich Prives M. Vol. I : The weight-bearing and locomotor system. The science of the viscera. The science of the organs of internal secretion./ пер. A. Aksenov. -Moscow: Mir Publishers, 2004. -608 p.: il.
8.	Prives M. G. Human Anatomy/ M.G Priwes, N. K. Lysenkov, V. I. Bushkovich Vol. 2 : The Science of the Vessels. The Science of the nervous Systems. The Science of the Sensory Organs. -2006. -439 p: il.
9.	Snell R. S. Clinical anatomy by regions [Text]: tutorial/ R. S. Snell. -9th ed. -Б.М., 2012. - 754 p..-ISBN 978-81-8473-658-8.-ISBN 978-1-60913-446-4, Б.И

8.2. Supplementary literature

1.	Agur AMR, Dalley AF. Grant's Atlas of Anatomy, 12th ed. Baltimore: Lippincott Williams & Wilkins, 2009.
----	---

2.	Dean DX, Herbener TE. Cross-Sectional Human Anatomy. Baltimore: Lippincott Williams & Wilkins, 2002.
3.	Essential Clinical anatomy. Fourth edition/Keith L. Moore PhD, FIAC, FRSM, FAAA; Anne M.R. Agur BSc(OT), MSc, PhD; Arthur F. Dalley I I PhD. 2011
4.	Federative Committee on Anatomical Terminology, 1998.
5.	Hardy SGP, Nafrel JP. Viscerosensory pathways. In Haines DE (ed), Fundamental Neuroscience, 2nd ed. New York:Churchill Livingstone, 2002.
6.	Haines DE. Neuroanatomy: An Atlas of Structures, Sections, and Systems, 7th ed. Baltimore: Lippincott Williams &Wilkins, 2007.
7.	Hutchins JB, Naftel JP, Ard MD. The cell biology of neurons and glia. In Haines DE (ed), Fundamental Neuroscience,2nd ed. New York: Churchill Livingstone, 2002.
8.	Gray's Anatom, 40th Edition. The Anatomical Basis of Clinical Practice. By Susan Standring, PhD, DSc, FKC/© 2008, Elsevier Limited. All rights reserved. Fortieth edition published 2008
9.	Keegan JJ, Garrett FD. The segmental distribution of the cutaneous nerves in the limbs of man. Anat Rec 102:409,1948.
10.	Lachman N, Acland RD, Rosse C. Anatomical evidence for the absence of a morphologically distinct cranial root of the accessory nerve in man. Clin Anat 15:4, 2002.

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

1.	http://www.medicalstudent.com/
2.	http://www.anatomyatlases.org/atlasofanatomy/index.shtml
3.	http://www.anatomyatlases.org/HumanAnatomy/CrossSectionAtlas.shtml
4.	http://www.anatomyatlases.org/AnatomicVariants/AnatomyHP.shtml
5.	http://www.bartleby.com/107/
6.	http://www.stitch.luc.edu/lumen/course_detail.cfm?crs_number=3074&checkref=639D79CC857A6C76C2723B7E014FCCB0
7.	http://reference.medscape.com/guide/anatomy
8.	http://ect.downstate.edu/courseware/haonline/index.htm
9.	http://cosmos.phy.tufts.edu/~rwillson/dentgross/headneck/index2.htm
10.	http://anatomy.med.umich.edu/
11.	http://library.med.utah.edu/WebPath/HISTHTML/NEURANAT/CNS016A.html
12.	http://depts.washington.edu/msatlas/
13.	https://zygotebody.com/
14.	http://www.youtube.com/watch?v=YZcBBelHnVI
15.	http://www.gfxtr.net/435/114749-the-best-dissection-for-medical-students.html

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
1	MOODLE	1,2 course English medium Anatomy Human Anatomy	1,2 1554 1cEmAHA_omy
2	ZOOM		

8.5. The list of the software and information & reference systems

- software: certified, license programs of general and educational assignment, information & reference systems – Garant, Consultant and etc.

1. Multimedia lectures throughout the course of discipline
2. Films
3. Internet resources

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
110	Classroom 1	1st floor	Tables; chairs; sectional table; sink for washing hands; dummies; tablets; tables.
120	Classroom 2	1st floor	Tables; chairs; sectional table; sink for washing hands; dummies; tablets; tables.
108	Classroom 3	1st floor	Tables; chairs; sectional table; sink for washing hands; dummies; tablets; tables.
129	Classroom 4	1st floor	Tables; chairs; sectional table; sink for washing hands; dummies; tablets; tables; laptop; TV for demonstration presentations, educational videos.
149,173	Classroom 7	1st floor	Tables; chairs; sectional table; sink for washing hands; dummies; tablets; tables; laptop; TV for demonstration presentations, educational videos.
227	Classroom 6	2nd floor	Tables; chairs; sectional table; sink for washing hands; dummies; tablets; tables.
258	computer class	2nd floor	Tables; chairs; computers; blackboard;
202	anatomical museum + classroom	2nd floor	Biologics; tables; chairs; dummies; tablets; tables; laptop; TV for demonstration presentations, educational videos.
232A	lecture hall	2nd floor	Tables; chairs; multimedia system (monoblock, projector) for demonstration presentations, educational videos.

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **Histology, Embryology, Cytology**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1,2 / 2,3**

Form of the interim assessment **Examination**

Department **of Histology, Cytology and Embryology**

Discipline workload **252** (academic hours) / **7** (credits)

Approved at the department meeting

Minutes No.

June 15th 2021

Head of the department



Professor A.L. Zashikhin

Author and compiler:

Bashilova E.N., k.m.s., docent,
Agaphonov Y.V., d.m.s., professor,
Dolgikh O.V., k.b.s., docent

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the Basic part of the curriculum (or to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects)

The discipline is related to prior subjects of the curriculum: biology, anatomy

The discipline is related to subsequent subjects of the curriculum: normal physiology, microbiology, immunology, pathoanatomy, physiopathology.

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive/diagnostic/organizational and administrative /research

2. Goal and tasks of the mastering of the course

To provide with the knowledge on cytology, embryology, general and private histology and abilities of their practical use, necessary for the successful mastering of contiguous biological and clinical disciplines, and similarly in-process doctor.

The tasks of study of discipline is mastering of conformities to law of development, structure, histophysiology tissues and organs and, through cognition of intercommunication of structure and function, understanding of normal vital functions of organism of man. Implementation of these tasks in the volume indicated below provides the achievement of aims of educating on a department.

3. List of planned learning outcomes of the course (module) in connection to the planned outcomes at completion of the educational program

Codes of the formed competences	Indicator of the competence achievement
ОПК 5. Способен оценивать морфофункциональные, физиологические состояния и патологические процессы в организме человека для решения профессиональных задач	ИД-1. Знает анатомию, гистологию, топографическую анатомию, физиологию, патологическую анатомию и физиологию органов и систем человека

*The list of professional competencies is based on the requirements of the professional standard "General medicine (district physician)", approved by the order of the Ministry of Labor and Social Protection of the Russian Federation of March 21, 2017 No. 293n

4. Volume of the course and types of academic classes:

Total workload of the course is 7 credits.

Type of the academic work	Total hours	Term	
		2	3
Students' contact work with the teacher (total)	110,3	54	56,3
Including:			
Lectures (L)	36	18	18
Seminars (Sem.)			
Practical classes (PC)	36	18	18
Clinical practicals (CP)			

Laboratory-based practicals (LBP)	36	18	18
Simulation-based practicals (SBP)			
Preparation for the examination (PE)	0,3		0,3
Preparation for the credit (PC)			
Exam consultations (EC)	2		2
Coursework (CW)			
Unsupervised work (UW) (total)	108	90	18
Examination control (EC)	33,7		33,7
Total discipline workload	252/7	144	108

5. Course content:

5.1. Contents of the sections of the course

Course section 1. Cytology

Theme 1. Introduction. Histological technique.

Object and tasks of course of histology with bases of cytology and embryology. A place of these disciplines is in the system of medical education. Connection with other clinical disciplines. Their role is in practical activity of doctor. History of development of histology. Basic concepts and terms. Types of histological structures.

Theme 2. Cytology.

Substantive provisions of cellular theory. Concept about an elementary cytoplasmic membrane. Cytoplasm and organoids. Membrane and unmembrane organoids. Their structural organization and functional value. Including, classification, their role in the vital functions of cage.

Nucleus. Cellular cycle. Methods of reproduction of cells.

Structure and function of kernel of cage. Structure of karyothesis, intercommunication of kernel and cytoplasm. Organization and types of chromoplasm, sexual chromoplasm, structure of karyonucleus. Mitotically cycle, his phases and their value. Types of fission. Mitosis, amitosis, meiosis. Polyploidy and aneuploidy, their value.

Course section 2. Embryology

Theme 3. Embryology of higher vertebral and human

Object and tasks of embryology : comparative embryology as basis for understanding of embryonic development of man. Gametes their difference from somatic cages. Basic stages of embryonic development of animal and man. Determination and embryonization. Description of properties of embryonic sheets. Methods of bookmark and embryonization of mesoblast.

Embryology of human. Extraembryonic organs.

Stages of embryogenesis. Forming, sources of development and functional value of extraembryonic organs. Formation of chorion and placenta. Types of

placentas. Immunological compatibility of fruit and mother. Modern technologies of treatment of sterility (video film).

Course section 3. General histology

Theme 4. General concepts about tissue. Epitheliums.

Fabric as one of levels of organization of living substance. Updating of fabrics and by a tissue cambium. Typification of fabrics on organization of their cambium and reparative regeneration of fabrics. Classification of fabrics and basic groups of tissue.

General description of epithelial tissue. Morphological, functional and genetic description of epitheliums. Ferrous epithelium as major fabric of gland. Classification of glands. Exo- and hemadens. Types of eccrine glands.

Theme 5. Blood.

Blood, her functions. Plasma of blood. Hemocytes, their classification, morphology and functional value. Concept about hemogram and leucocyte formula, their value for a clinic. Age-related changes of hemogram. Lymph, her composition and value.

Muscular-trophic tissue. General description of fabrics of internal environment, their classification and principles of organization.

Theme 6. Fibred connecting tissue.

Actually connecting tissue (fibred). General description and value of intercellular substance. Cages of loose connecting tissue. Macrophages (histiocytes), their role in the protective reactions of organism, structure and origin. Concept about the macrophages system. Dense connecting tissue. Connecting tissue with the special properties.

Theme 7. Cartilaginous tissue.

General morphological and histochemistry description. Cartilaginous cages (chondrocytes). Intercellular substance. Types of cartilaginous tissue. Height of cartilage. Regeneration of cartilaginous tissue.

Theme 8. Bone tissue.

General description, classification. Cages of bone tissue. Intercellular substance of bone tissue. Regeneration of bone tissue. Bone as organ. Microscopic structure of tubular bone and flat bones. Direct and indirect osteogenesis. Alteration of bone during the height of organism. Factors influencing on the height of bones.

Theme 9. Muscular tissue.

Muscular tissue of somatic type, histogenesis. Muscular fibre as morphon of tissue. Muscle as organ, her structure, innervation and vascularization. Regeneration of muscles. Striated muscular tissue of coelomic type (cardiac

muscular fabric). Atypical cardiac muscular tissue and its functional features. Possibilities of regeneration of myocardium. Smooth muscular tissue of mesenchymal origin. Histogenesis, smooth musculature. Cellular differentiation and organization of smooth muscular tissue. Structure and population of smooth myocytes of certain smooth musculature. Types of leiomyocytes and features of their organization. Organization of retractive vehicle and mechanism of reduction of smooth myocytes. Regeneration of smooth musculature.

Theme 10. Nervous tissue.

Histogenesis of nervous tissue and their classification. Neurons, their morphological and functional classification. Classification, functional value and structure. Microglia, their genetic belonging to the macrophage system and properties.

Nervous fibres, nervous completions, peripheral nerve.

Classification, structure and functions, regeneration of nervous fibres.

Nervous completions. Classification of nervous completions. Synapses, and their role in the transmission of excitation on the chain of neurons. Reflex arcs - functional units of the nervous system, their composition.

Theme 11. Diagnosticum 1

Course section 4. Special histology

Theme 12. Organs of the nervous system

Spinal cord. Grey and white substance. Off-line nervous system. General morphological and functional description. Types of reflex arcs. Features of structure of reflex arcs of the off-line nervous system.

Cortex. Cerebellum Cytoarchitectonics., neuron composition and layers of bark of large hemispheres, interneuronal connection. Idea about module organization of bark. Structure and neuron composition of bark of cerebellum.

Theme 13. Sense-organs. Organs of sight, sense of smell.

Concept about analyzers. Classification of sense-organs on the structure of receptor vehicle. Organ of sight. Development, structure. Neuronal composition of retina. Auxiliary parts of eye : eyelids, tear vehicle, muscles of eyeball. Olfactory. Olfactory epithelium. Olfactory neurosensory cages. Histophysiology of sense of smell.

Ears, equilibrium and taste.

General description. Internal ear: bone and membranous labyrinths.

Vestibular part of membranous labyrinth. Receptor departments of spherical sacs and semicircular channels, their cellular composition. Histophysiology of perception of sounds. Organ of taste. General functional description.

Histophysiology of organ of taste.

Theme 14. Cardiovascular system.

Ontogenesis of the cardiovascular system. Classification of blood and lymphatic vessels. Arteries and veins. Histological elements of wall of vessels and their value. Connection of microscopic structure with the terms of hemodynamics in him. Vessels of microvasculature. Structure, hemodynamic features, value in metabolism and depositing of blood. Heart. General functional description. Ultrastructural and cytochemical description of cellular elements of the conducting system. A value of PSNS in work of heart.

Theme 15. Hematogenesis.

Development of blood, as tissues. Post-embryonic hematopoiesis. Theories of hematogenesis. AA Maksimov and his role in creation of monophyletic. Concept and colony units. Barrel cages of blood and their property. Morphologically identified stages of development of cages of blood. Structural description of cages in different red corpuscles, granulocytes, monocytes. Adjusting of hematopoiesis. Structure and functions of marrow. System of immune defense.

Basic concepts: immunity, antigen, antibody. Lymphopoiesis. Types lymphocytes and their co-operation at development of immunoreaction. Cellular and humoral type of immunity. Central and peripheral organs of the immune system.

Theme 16. Endocrine system.

General description of the endocrine system, feature of гистофизиологии of hemadens. Classification of ductless glands. Gipotalyamo - pituitary system. Epiphysis. Structure and supposed functions of epiphysis. Peripheral glands. Physiological and reparative regeneration of fabrics of ductless glands. Change of glands in child's, elderly and senile age.

Theme 17. Digestive system. Oral cavity.

General principle of organization of structure of wall of gastrointestinal tract. Embryonic development of the digestive system. Structure of mucous membrane of oral cavity. Structure of lip, cheek, language. Teeth. Enamel, dentine, cement : structure, chemical composition. Endodontium. Periodont. Odontogeny. Amygdales, salivary glands. Salivary glands, classification. Large salivary glands. Embryonic development. Structure and histophysiology. Exo- and endocrine functions. Features of structure of amygdales. Their value.

Theme 18. Gullet, stomach, bowels.

Structure and by a tissue composition of organs. Cytophysiology of exo- and hemadens. Structure of wall and by her tissue composition in the different departments of bowels. The system is a crypt - hair, as functional unit. Types of cages of epithelium of hair and crypt, their structure and cytophysiology. Histophysiology of the wall digestion and suction. Vermicular appendix.

Features are his structure and value. Endocrine vehicle of digestive channel, him descriptions, concept about APYD to the system. Lymphoid vehicle of digestive tract. Functional description. Concept about local immunity.

Theme 19. Liver, pancreas.

General description. Features of blood supply. Structure of lobule as structural-functional unit of liver. Regeneration. Features of structure of liver new-born. Description of liver of children of early age and at aging of organism. General description of pancreas. Structure eccrine and endocrine departments.

Theme 20. Diagnosticum 1

Theme 21. Breathing organs. Skin and it's derivatives.

Description of the respiratory system. Auriferous ways and respiratory department. Features of structure of wall of auriferous ways : nasal cavity, larynx, trachea and main bronchial tubes. By a tissue composition and description of their shells. Cellular composition of epithelium of mucous membrane. Acini as functional unit of lung. Structural components of acini. Air-blood barrier and his value in the interchange of gases. Development of lung is in a postnatal period. Age-related changes of lung in the process of aging.

Description and by a tissue composition of skin. Epidermis. Concept about composition of epidermis. Local system of immunological supervision of epidermis. Derma. Papillary and reticulated layers, by their tissue composition. Glands of skin, hair, nails.

Theme 22. Urinary system

The morfo - functional characteristic of system of uric bodies. Nephron - morfo - functional as kidney unit, its structure. Concept and a structure of counterflow system of a kidney. Morfo - functional bases of regulation of process uropoiesis. The endokrinnyj device of a kidney: juxtaglomerular a complex and interstitial cages. Their structure and function.

Theme 23. Man's sexual system.

The morfo-functional characteristic of system of genitals. Man's genitals. The general morfo - functional the characteristic testes. Convoluted tubules seed, a wall structure. Spermatogenesis. Endocrine function testicle. Regulation functions testicle. Features testicle the newborn, till the period of puberty in a sexual maturity and at organism ageing. Possibility of damaging action on testicle phisico - chemical factors - radiation, alcohol, temperature, etc. in connection with them morfo - functional features. Their structure and functions.

Theme 24. Female sexual system.

Female genitals. Histogeny. The general morfo - functional the characteristic ovary. Oogenesis .Differences ooogenesis from

spermatogenesis. Endokrinna function ovary: female sexual hormones and cellular elements developing them. Features ovary newborns before puberty, in a sexual maturity and at ageing. A structure and functions. A uterus. The general morfo - the functional characteristic. A menstrual cycle and its phases. Features of a structure endometrial in various phases of a cycle. Communication of cyclic changes endometrial and ovary. Uterus reorganization at pregnancy and after the delivery. Features of a uterus of newborns, girls before puberty, in puberty, at adult women and at ageing. Chest (dairy) gland. The general morfo - the functional characteristic. Functional morphology lactating and non-lactating (nonfunctioning and after a lactation) a mammary gland. nejro - endocrine regulation of functions of mammary glands in a course ovarialno menstrual a cycle and at pregnancy.

5.2. Sections and types of studies

No.	Name of the course section	L	LPB	SRS	Total hours
1	Cytology	2	9	10	21
2	Embryology	2		2	2
3	General histology	10	21	74	105
4	Private histology	22	42	22	86

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

№	Name of the course section	Types of the unsupervised work	Forms of control
1.	I.Cytology Introduction. Histological technique. Microscope	To fill a table will "Define essence of basic concepts". To study the table of basic histological dyes and reactions, chart of colouring of microsection. To study the charts of structure of different types of microscopes, motion of rays, rules of work with a microscope.	Discussion on a theory and to preparations, verification of albums, test tasks in Moodle
	General morphology of cells	To study diffraction pattern and charts of structure of cage, organoids, cellular membrane, types of transport. To fill a table the "Intercellular contacts, classification of organoids, including". To study and complement a table "Description of components of cytoskeleton". To study pictures and sign the elements of kernel, nuclear pore, levels of compaction DNP.	
	Cellular cycle. Methods of reproduction of cells	To study and complement a table "Description of cellular cycle", "Adjusting of cellular cycle", "types of cellular death".	
2.	II.Embryology Embryology of higher animals and man (1)	To study pictures to sign: the stages of embryonic development of man, chart of impregnation, structure of embryo in the different terms of embryogenesis. To study and sign the picture of embryonization of mesoblast. To fill a summary table "Embryogenesis of man".	Discussion on a theory and to preparations, verification of albums test tasks in Moodle
	Embryology of higher animals and man (2)	To study diffraction pattern and charts of forming of placenta, formation of embryonic folds, embryonization of extraembryonic organs. To draw and sign the types of placentas. To fill a table the "Extraembryonic organs of man".	
3.	III.General histology General concepts about tissue. Epitheliums	To study pictures and sign the types of histological structures, basic determinations. To fill the table of " Kinds regenerations", "Classification of fabrics", " Morpho - functional signs and properties of epitheliums"	Discussion on a theory and to preparations, verification of albums, reports, decision of situational tasks, test tasks in Moodle
	Multi-layered epitheliums, glands	To fill the table of " Histogenetic classification of epitheliums", "Classification of glands". To study the pictures of types of secretion.	
	Mesenchyme, connecting tissues	To fill a table "Classification of connecting tissues", to study diffraction pattern and charts of structure of components of connecting tissue. To study and complement a	Discussion on a theory and to preparations,

		table "Description of components of intercellular substance", "Description of basic cellular types of connecting tissue", "Formation of collagen fibres, "Neurohumors of obese cages". To fill a table "Comparative description of connecting tissues".	verification of albums, reports, decision of situational tasks in Moodle
	Blood	To fill the table of " Morpho -functional signs and properties of fabrics of internal environment of organism". To study the chart of embryonization of mesenchyme and barrel cage of blood. To study and complement a table "Composition of plasma of blood". To study pictures and fill a table "Leucocytes". To study the chart of activating of neutrophil. To become acquainted with the table of "Disorder of phagocytic function of neutrophil ".	Discussion on a theory and to preparations, verification of albums, reports, decision of situational tasks, test tasks in Moodle
	Cartilaginous tissues	To study and sign a picture "Structure of intercellular substance of hyaline cartilage". To fill a table "Classification of cartilaginous fabrics", "Height and regeneration of cartilages", "Effects of vitamins and hormones on a hyaline cartilage".	Discussion on a theory and to preparations, verification of albums
	Bone tissue. osteogenesis	To fill a table "Classification of bone fabrics", to study pictures and sign the elements of bone fabric, stage of osteogenesis. To study the charts of regeneration of bone fabric.	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Muscular tissues	To fill a table "Classification of muscular tissues". To study pictures and sign elements "Structure of striated muscular fibre", "Structure of myofibrils", "Phase of reduction of myofibrils", "Structure of muscle as an organ", "Phenotypes and elements of cardiomyocytes ". To study charts and tables the "Albuminous structure of myofibrils", "Histogenesis and principles of reactivity of GMG of internal organs", "Phenotypes of smooth myocytes".	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Nervous tissue, neurons.	To study pictures and sign the elements of nervous tissue	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Nervous fibres, nervous completions	To study pictures and sign elements of nervous fibre, realization of nervous impulse, regeneration of nervous fibre. To study a table "Classification of nervous fibres", "Classification of nervous completions", "Classification of neurotransmitters".	
4.	IV. Private histology Organs of NS (1) are the Spinal cord, spinal knot, peripheral nerve	To study diffraction pattern organs of HC, to study the charts of "Kinds reflex arcs"	Discussion on a theory and

	Organs of NS are Cortex, cerebellum.	To study the chart of synaptic connections in the bark of cerebellum, changes in a nerve after his cut. To fill a table "Intercommunication and types of neurons of bark of cerebellum". To study and sign the charts of structure of the mixed and amylenic nerve.	to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Sense-organs are Organs of sight, sense of smell	To study charts transmissible and sweepable diffraction pattern on development and ultrastructural organization of sense-organs. To fill a table the "Functional vehicles of eye", "Organogeny of sight".	Discussion on a theory and to preparations, verification of albums, decision of situational tasks
	Sense-organs are Ears, equilibrium, taste	To study charts transmissible and sweepable diffraction pattern on development and ultrastructural organization of sense-organs 2 groups. To fill a table "Comparative description of sense-organs".	
	Cardiovascular system	To fill a table "Tissue composition of organs of the cardiovascular system". To study charts, transmissible and sweepable diffraction pattern hearts and blood vessels.	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Myeloid hematogenesis. Red marrow	To diagrammatize process of development of red corpuscles, granulocytes. To study transmissible and sweepable diffraction pattern cages of red marrow.	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Lymphopoiesis. Organs of immune defence	To study charts, transmissible and sweepable diffraction pattern of post-embryonic hematopoiesis, thymus new-born, spleen. To study the types of immunoreactions. To fill a table "Tissue composition of organs of lymphopoiesis".	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Endocrine system	To study charts transmissible and sweepable diffraction pattern of endocrine cages of different organs. To study classification of organs of the endocrine system, adjusting mechanisms.	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Digestive system. Organs of oral cavity.	To study charts transmissible and sweepable diffraction pattern organs of oral cavity	Discussion on a theory and to preparations, verification of albums,
	Salivary glands.	To study charts transmissible and sweepable diffraction pattern of salivary glands	

	Amygdales		decision of situational tasks, test tasks in Moodle
	Teeth, periodont. Development, changing of teeth	To study charts transmissible and sweepable diffraction pattern elements of tooth, study a tissue composition and age-related features of teeth.	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Gullet, stomach, bowels	To study charts transmissible and sweepable diffraction pattern organs of the digestive system, study cellular composition of glands of stomach, bowels. To fill the comparative table of structure of different departments of bowels	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Liver, pancreas	To study charts, transmissible and sweepable diffraction pattern acinar of pancreas, pancreatic small island, hepatocyte, their relationship with sinewave vessels. To study the morphological features of different types of icteruses	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Respiratory system	To study charts, transmissible and sweepable diffraction pattern of cellular composition of epithelium of aeriferous ways, air-blood barrier. To fill the table of distinctive features of bronchial tubes of different calibers	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Skin and her derivatives	To study charts, transmissible and sweepable diffraction pattern epidermis, structure and innervation of hair, development of skin, hair, sweat-glands	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Secretory system	To study charts, transmissible and sweepable diffraction pattern of the vascular system of bud, lamb's-feet of kidney Taurus. To fill the chart of development of primary bud and sexual glands, tissue composition of organs of the secretory system	Discussion on a theory and to preparations, verification of albums, decision of situational tasks, test tasks in Moodle
	Masculine sexual system	To study charts, transmissible and sweepable diffraction pattern spermatogenesis for a man, structures and functions of testicles, structure and functional value of prostate	Discussion on a theory and to preparations,

		gland	verification of albums, decision of situational tasks, test tasks in Moodle
	Woman sexual system	To study charts, transmissible and sweepable diffraction pattern of integumentary epithelium of ovary, shells of oocyte. To study the hormonal adjusting of ovarian-menstrual cycle	

7. Forms of control

7.1. Current forms of control

- oral (an interview, a report, a colloquium, presentations of projects)
- written (checking of tests, review papers, essays, abstracts, lecture notes, solving of practical tasks, preparation of a case history).

7.2. Forms of the interim assessment (examination)

Course examination is conducted in oral, consists of three parts:

1. Stage - final test control (all students hand over on the last control employment of semester), in an examination session;
2. Stage - answer on two histological preparations (practical part);
3. Stage - answer for three questions of examination ticket and situational task.

Students collecting a final rating point in size of 93 and more than points can be released from 2th and 3 parts of examination.

8. Library and information materials of the course

8.1 Compulsory literature

1. Inderbir Singh's Textbook of Human Histology with Colour Atlas and Practical Guide [Text]: учебное пособие/ ed. N. Vasudeva. -7 th ed. -New Delhi, 2014. - 439 p.-ISBN 978-93-5152-322-2, Б.ц
2. Singh I. Textbook of human histology : [with colour atlas]/ I. Singh. -5th. ed.. -Delhi: Jaypee brothers medical publishers (P) LTD, 2007. -365 p.
3. Singh I. Textbook of Human Histology : учебное пособие/ I. Singh. -5th. ed.. -New Delhi: Jaypee brothers medical publishers (P) LTD, 2006. -365 p: il.
4. S. I. Yushkantseva, V.L. Bykov A brief atlas of histology, cytology and embryology: St. Petersburg, 2007.-120p.
5. Textbook of Histology, 4 Edition, Gartner, Leslie P., PhD 2017 by Elsevier, Inc.
6. Stevens & Love's Human Histology, 4 Edition, Lowe, James S., 2015, by Mosby, an imprint of Elsevier Limited. ClinicalKey.

8.2 Supplementary course literature

1. Kuznetsov S.L. Histology, cytology and embryology : a course of lectures: The English version was edited by E.V. Babchenko/ S.L. Kuznetsov, T.V. Boronikhina, V.L. Goryachkina. -Москва: Medical Informational Agency, 2004. -239 p.
2. Bashilova E.N. Materials of monitoring students' knowledge of the special histology/ methodical development for students 1 and 2 courses of faculty of English medium.- NSMU,dep. of histology.-Arkhangelsk:2008.-108p.
3. Bashilova E.N. Materials final control of students' knowledge of general and special histology/ methodical development for students 2 course of faculty of English medium.- NSMU,dep. of histology.-Arkhangelsk:2008.-22p.
4. Visceral smooth muscle tissue A. Zashihin , Ya.Selin / Arhangelsk.- 2001.
5. Bykov VL Cytology and general histology (functional morphology of cells and tissues) . - SPb .: SOTIS 2002
6. Bykov VL Private histology (functional morphology of cells and tissues) . - SPb .: SOTIS 2002
7. Singh I. Textbook of Human Histology/ I. Singh. -4th ed.. -New Delhi: Jaypee Brothers Medical Publishers(P) LTD, 2002. -355 p.: il
8. Textbook of Histology, 4 Edition, Gartner, Leslie P., PhD 2017 by Elsevier, Inc. ClinicalKey.
9. Netter's Essential Histology, 2 Edition, Ovalle, Wiliam K., PhD, 2013, by Saunders, an imprint of Elsevier Inc. ClinicalKey.
10. Histology:n Identification Manual, Tallitsch, Robert B., PhD., 2009 by Mosby, Inc., an affiliate of Elsevier Inc. ClinicalKey.
11. Concise Histology, Gartner, Leslie P., PhD, 2011 by Saunders, an imprint of Elsevier Inc.

ClinicalKey.

8.3. List of Internet resources required for mastering of the course (module)

№	Resources	URL address	Resource Annotation
1	Digital library system "IPRbooks"	http://www.iprbookshop.ru/	
2	Digital Library of Medicine "Doctor's consultant"	http://www.rosmedlib.ru/	
3	Digital versions of publications scientific digital library – "eLIBRARY"	http://elibrary.ru/	Научная электронная библиотека eLIBRARY.RU - это крупнейший российский информационно-аналитический портал в области науки, технологии, медицины и образования, содержащий рефераты и полные тексты более 29 млн научных статей и публикаций, в том числе электронные версии более 5600 российских научно-технических журналов, из которых более 4800 журналов в открытом доступе.
4	University digital library	http://lib.nsmu.ru/lib/	
5	Digital library card of the Central Scientific Library of Medicine	http://www.emll.ru/newlib/	

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
	Moodl	English medium Histology, Embryology, Bashilova E.N., k.m.s., docent, Agaphonov Y.V., d.m.s., professor, Dolgikh O.V., k.b.s., docent A.Zashikhin d.m.s., professor, https://edu.nsmu.ru/course/view.php?id=395	Web- support

8.5. The list of the software and information & reference systems

При осуществлении образовательного процесса студентами и профессорско-преподавательским составом используются следующее программное обеспечение: **операционная система** - MS Windows Vista Starter, MS Windows Prof 7 Upgr; **офисный пакет** - MS Office 2007; **другое ПО** - 7-zip, AdobeReader, Kaspersky Endpoint Security.

9. Material and technical facilities necessary for the educational process

No.	The name of the school's office	Location of the study room	List of the main equipment of the study room
1	Laboratory-based practicals	1243	36 specialized tables with illumination Microscopes "Biola », microscope

			model - 9-10, projection microscope
2	Laboratory-based practicals	1236	24 specialized tables with illumination Microscopes "Biola », microscope model - 9-10, projection microscope
3	Laboratory-based practicals	1234	20 specialized tables with illumination Microscopes "Biola », microscope model - 9-10, projection microscope
4	Laboratory-based practicals	1241	36 specialized tables with illumination Microscopes "Biola », microscope model - 9-10, projection microscope

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **Physical culture and sport**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1 / 1,2**

Form of the interim assessment **Pass/fail test**

Department **of physical culture and medical rehabilitation**

Discipline workload **72** (academic hours) / **2** (credits)

Approved at the department meeting

Minutes No. 10

June 15th 2021

Head of the department



N.I. Ishekova

Author and compiler:

G.V. Puchinskiy

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the Basic part of the curriculum (or to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects)

The discipline is related to prior subjects of the curriculum: physical culture at school, Physical education at school.

The discipline is related to subsequent subjects of the curriculum: “Elective courses of physical culture”.

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum:

Practice oriented lessons and lectures covering key topics in the sphere of physical education.

2. Goal and tasks of the mastering of the discipline

The goal of the physical culture course at a higher education institution is to develop the physical culture of students, as well as their capability to purposefully and on a reasonable methodological basis use various physical culture means, methods, and organizational forms allowing them to develop the personal health saving life activities required for the professional and personal formation.

In order to achieve this goal, the following *tasks* should be fulfilled during the course:

1. To develop the sustainable and positive motivation of students for learning, as well as for taking part in competitions and research-to-practice conferences on the physical culture.

2. To develop students' knowledge about the physical culture theory, history, and methodology using the innovative learning techniques.

3. To educate students on the know-how and skills of practicing various sports, as well as the state-of-the-art neuromuscular and health improvement systems.

4. To develop students' readiness to apply the sport and health improvement techniques to achieve a high level of physical health and maintain it during the study at a higher education institution and the further professional career.

5. Ability and readiness for educating adults, teenagers, and their relatives on the basic health improving hygiene practices promoting health, disease prevention, as well as development of the healthy lifestyle skills.

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
УК-7 Способен поддерживать должный уровень физической подготовленности для обеспечения полноценной социальной и профессиональной деятельности	7.1. Применяет принципы физического воспитания для повышения адаптационных резервов организма и укрепления здоровья 7.2. Выбирает здоровьесберегающие технологии для поддержания здорового образа жизни с учетом физиологических особенностей организма 7.3. Обосновывает грамотное планирование своего рабочего и свободного времени для оптимального сочетания физической и умственной нагрузки 7.4. Поддерживает оптимальный уровень физической подготовленности для обеспечения полноценной социальной
ОПК-3 Способен к противодействию	3.3. Проводит санитарно-просветительскую

применения допинга в спорте и борьбе с ним	работу, направленную на борьбу с допингом в спорте, среди обучающихся.
--	--

*The list of professional competencies is based on the requirements of the professional standard "General medicine (district physician)", approved by the order of the Ministry of Labor and Social Protection of the Russian Federation of March 21, 2017 No. 293n

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 2 credits.

Type of the academic work	Total hours	Term	
		1	2
Students' contact work with the teacher (total)	36	18	18
Including:			
Lectures (L)	8	4	4
Seminars (Sem.)			
Practical classes (PC)	28	14	14
Clinical practicals (CP)			
Laboratory-based practicals (LBP)			
Simulation-based practicals (SBP)			
Preparation for the examination (PE)			
Preparation for the credit (PC)			
Exam consultations (EC)			
Coursework (CW)			
Unsupervised work (UW) (total)	36	18	18
Examination control (EC)			
Total discipline workload	72/2	36	36

5. Course content:

5.1. Contents of the sections of the course

No	Name of the course section	Content of the section
	Basic part	
1	Introductory section	Arrangement of the physical culture education process in a higher education institution. Introduction to the physical culture department, the sports/fitness complex, and the sports club. Allocation to the functional health groups for exercises in the main, sports, and special sections. Safety induction at physical education and sports classes. Testing of movement qualities and abilities, evaluation of physical development. Functional status evaluation.
2	Track and field athletics	Even and changing pace running. Jumping exercises. Special running exercises. Accelerated running, up to 60 m. "Follow-the-leader" running. Accelerated uphill running, up to 20 m. Accelerations, up to 60 m. Standing long-jump

		<p>technique. High start technique. Acceleration from various preparatory positions. Technique of passing the baton – demonstration, explanation. Simulation of passing the baton on the spot. Relay races with passing the baton.</p> <p>Middle-distance and long-distance running: 300, 500, 1000, and 2000 m.</p>
3	Basketball	<p>Fundamental techniques. Main shots. Two-handed set shots. Dribbling on the spot. Passing on the spot. Running shots: one-handed set shot, standing two-handed shot. Jump shots: Running shots. Shots. Free throw. Credit out of 5-(3-2-1) goals. Refereeing rules. Interaction between three cornermen and three guards during a game. Movement tasks with the basketball elements. Educational training games by the simplified rules. Educational training game. Development of coordination capabilities and special endurance.</p>
4	Badminton	<p>Fundamental techniques. Main shots. High long serve. Short serve. Flat serve. High doubles serve. Net shots. Base-line shots. Grips. Racket movements.</p> <p>Game techniques. Game tactics. Refereeing rules. Interactions during a game. Educational training game.</p> <p>Development of coordination capabilities and special endurance.</p>
5	Volleyball	<p>Prevention of injuries at volleyball classes. Improvement of overhead and forearm passes in combination with movements. Forearm forward and hook serves. Game exercises. Serve receive / passing exercises in groups. Ball return with a fist. Educational training volleyball game. Volleyball warm-up rules. Passing tactics. Playing volleyball by the rules. Serve receive / passing exercises in groups. Defense tactics: selection of a serve receive method, supervision. Practice of the techniques learned in a two-sided game. Games and relay races with a ball. Games: “Gun-fight”, “Sniper”, “Hunters and Ducks”. Record exercises with a ball. Five (5) successful serves (high, low, or hook serves at option). 20 passes in pairs (overhead and forearm receive).</p> <p>Educational training game.</p>

6	Professional and Applied Physical Training	General, special, athletic and profession-ally applied physical training of students. Professionally applied physical training means and methods. Development of themain and professionally applied physical qualities and abilities, as well as the movement skills. Sets of professionally oriented physical exercises. Appliedsports. Assessment of students' professionally applied fitness.
7	Testing Section	Test of residual physical culture knowledge. Testing of movement quali-ties and abilities, Evaluation of physical development. Functional status evaluation. Filling-in of a student's athletic health passport (medical and athletic records). Point-rating system based end-of-termtest on physical culture.
Elective part		
8	Health improving training	Health improving training in the physical education of students. Mastering and studying the main health and fitness techniques. Aerobic (cardiorespiratory) training, ar- tistic (muscular) gymnastics, breathing exercises, joint gymnastics, muscular re- laxation, eyes gymnastics, stretching, etc. Peculiarities of the health improvement oriented development of the physical qualities and abilities. Balancing of physical exercises. Adjustment of health improving exercises based on health grounds
9	Theory section	. The effect of physical exercises on health. . Load: outer and inner load (the basisof load, loading factors). . Load: outer and inner load (training methods, load and adaptation). 4. Methodical problems of the arrange-ment of load.

5.2. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
	Introductory section			4				12	16

	Theory section	8						8
	Practicum section							
	-Track and field athletics			4			6	10
	-Basketball							
	-Volleyball			4			6	10
	-Badminton			4			6	10
	-Health improving training			4			6	10
	-Professional and applied physical training			3				3
				3				3
	Testing section			2				2

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	Introductory section	Completing tasks in workbook on physical culture	Workbook
2	Practicum section	Sessions related to sports and healthy lifestyle, Olympic and adaptive kinds of sport	Lectures on Moodle digital platform

7. Forms of control

7.1. Current forms of control

- Oral: interview, oral report, and snap poll,
- In writing: check of workbooks, tests, library-research papers, and notes,
- Practical: testing of physical qualities and abilities,
- Assessment of the physical development indicators,
- Assessment of movement skills,
- Functional status evaluation.

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment: pass/fail test.

Stages of the interim assessment

1. Stage – testing of physical qualities and abilities
2. Stage - evaluation of knowledge and movement skills
3. Stage – evaluation of physical training level using the point-rating system

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

1. Евсеев Ю.И. Физическая культура [Электронный ресурс] : [для студентов и преподавателей высш. и сред. учеб. заведений]/ Ю. И. Евсеев. -9-е изд.. -Ростов-на-Дону: Феникс, 2014. -444 с.- URL: <http://www.studentlibrary.ru/book/ISBN9785222217627.html>

8.2. Supplementary literature

1. Workbook on physical culture [Электронный ресурс] : методический материал / S. L.Sovershaeva [и др.]. - Архангельск : Изд-во Северного государственного медицин- ского университета, 2016. - 36 p. - Режим доступа: http://nb.nsmu.ru/cgi-bin/irbis64r_11/cgiirbis_64.exe?LNG=&Z2ID=&I2IDBN=ELIB&P2IDBN=ELIB&S2IS21S21REF=3&S21FMT=fullwebr&C21COM=S&S21CNR=20&S21P01=0&S21P02=1&S21P03=I=&S21STR=elb/W83-286633

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

No	Resources	URL address	Resource Annotation
1	International university sports federation	https://www.fisu.net/	ISU offers opportunity and inspiration to students around the world to play sport. The health, wellbeing, and experiences that students gain from sport help them become exemplary leading members of society. Hence, FISU's motto of Excellence in Mind and Body.
2	Volleyball advisors	http://www.volleyballadvisors.com	Includes volleyball game and practice tips - volleyball drills, skills, tactics, conditioning exercises and rules among others.
3	Basketball rules	https://www.fiba.basketball/	FIBA, the International Basketball Federation, is the world governing body for basketball. Founded by eight nations in 1932, we now bring together 212 National Basketball Federations from all over the world. A non-profit making organization, our mission is to develop and promote the game of basketball, uniting the wider basketball community, which counts more than 450 million players and fans.

4	World Health Organization	https://www.who.int/	Dedicated to the well-being of all people and guided by science, the World Health Organization leads and champions global efforts to give everyone, everywhere an equal chance to live a healthy life.
5	Olympic games	https://www.olympic.org/	Olympic committee. Olympic games.

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

No	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
1	Moodle	"1 course General Medicine Physical culture and sports". Authors: G.Puchinskiy, M.Repitskaya, L.Sharenkova. https://edu.nsmu.ru/course/view.php?id=1201	Practice oriented lessons and lectures covering key topics in the sphere of physical education.

8.5. The list of the software and information & reference systems

9. Material and technical facilities necessary for the educational process*

No	Name of the study room	Location of the study room	List of the main equipment of the study room
1	Classroom for lecture-type classes No 2403 of Marine Medicine, administrative educational building, 4th floor	Arkhangelsk, Troitsky prospect, 51	A set of educational furniture (tables, chairs, screen, whiteboard) teacher's workplace, work-places for students for 300 seats, laptop, projector, video camera, whiteboard marker
2	Classroom for seminar-type classes, group and individual consultations, current control and intermediate certification No. 1429, main educational building, 4th floor	Arkhangelsk, Troitsky prospect, 51	A set of educational furniture (tables, chairs, screen, board), teacher's workplace, work-places for students for 10 seats. b), laptop, projector, video camera, whiteboard marker
3	Sports hall No 1421, administrative educational building, 4th floor area of 466.8 sq.m	Arkhangelsk, Troitsky prospect, 51	Metal tower, 1-element board, basketball rings, gymnastic mats, gymnastic benches, Swedish wall, volleyball racks, sports scoreboard, power simulators, horizontal bars to the Swedish wall, basketball boards

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE COURSE (MODULE)

Discipline **Elective subjects of physical culture and sport. General physical preparation**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1,2,3 / 1,2,3,4,5,6**

Form of the interim assessment **Pass/fail test**

Department **of Physical Culture and Medical Rehabilitation**

Course workload **328** (hours)

Approved at the department meeting

Minutes No. 10

June 7th 2021

Head of the department



N.I. Ishekova

Author and compiler:

M.N. Repitskaya

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects.

The discipline is related to prior subjects of the curriculum: physical culture and sports.

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive.

2. Goal and tasks of the mastering of the discipline

The goal of the physical culture course at a higher education institution is to develop the physical culture of students, as well as their capability to purposefully and on a reasonable methodological basis use various physical culture means, methods, and organizational forms allowing them to develop the personal health saving life activities required for the professional and personal formation.

In order to achieve this goal, the following *tasks* should be fulfilled during the course:

Mastering the system of practical skills that ensure the preservation and strengthening of health, mental well-being, development and improvement of psychophysical abilities, qualities and personality traits.

Ensuring general and professional physical fitness, which determines the psychophysical readiness of a student for a future profession.

To develop students' readiness to apply the sport and health improvement techniques to achieve a high level of physical health and maintain it during the study at a higher education institution and the further professional career.

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
---------------------------------	---

Universal competencies (UC)-№ UK-7 Student is able to maintain the proper level of physical fitness to ensure full social and professional activity.	ИД -7.1. Student applies the principles of physical education to increase the adaptive reserves of the body and strengthen health ИД -7.2. Student chooses health-saving technologies to maintain a healthy lifestyle, taking into account the physiological characteristics of the body ИД -7.3. Student justifies competent planning of your working and free time for the optimal combination of physical and mental stress ИД -7.4. Student maintains an optimal level of physical fitness to ensure full social and professional activity
---	---

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 328 hours

Type of the academic work	Total hours	Term					
		1	2	3	4	5	6
Students'contact work with the teacher (total)	192	12	12	42	42	42	42
Including:							
Lectures (L)	24			6	6	6	6
Seminars (Sem.)	168	12	12	36	36	36	36
Practical classes (PC)							
Clinical practicals (CP)							
Laboratory-based practicals (LBP)							
Simulation-based practicals (SBP)							
Preparation for the examination (PE)							
Preparation for the credit (PC)							
Exam consultations (EC)							
Coursework (CW)							
Unsupervised work (UW) (total)	136	18	18	12	38	12	38
Examination control (EC)							
Total discipline workload	328	30	30	54	80	54	80

5. Contents of the course:

5.1. Contents of the sections of the course

No.	Name of the course section	Contents of the section
-----	----------------------------	-------------------------

1	2	3
1	Healthy life style of a person	<p>1. Physical education</p> <p>2. Track and field. Basketball</p> <p>3. Sports and healthy lifestyle</p> <p>4. Modern types of fitness</p> <p>5. Health Concept. Human Body Build.</p> <p>6. Assessment of Physical Development and Functional Status of Human Body. Assessment of Physical Development.</p> <p>7. Health Loss Risk Factors.</p> <p>8. Profession-specific physical training (pspt) of specialists.</p> <p>9. Hypodynamia. Physical Activity for Disease Prevention.</p> <p>10. Energy Metabolism during Physical Exercises. Dynamics of Physiological State during Physical Activities.</p> <p>11. Influence of Physical Activity on Various Body Systems. Role of Physical Exercises.</p> <p>12. Sports Injuries. Sports Injury Prevention.</p>
2	General physical fitness without equipment.	Introductory session. Safety. A set of simple exercises. A set of exercises to increase flexibility, agility, speed and strength. Testing of movement qualities and abilities, evaluation of physical development.
3	General physical training with weights.	Introductory session. Safety. Exercises with dumbbells. A set of exercises to increase flexibility, agility, speed and strength. Exercises with ball.
4	Stretching	Introductory session. Safety. Basic stretching exercises. Static stretching exercises.
5	Testing Section	Test of residual physical culture knowledge. Testing of movement qualities and abilities,

		Evaluation of physical development. Functional status evaluation. Filling-in of a student's athletic health passport (medical and athletic records). Point-rating system based end-of-term test on physical culture.
--	--	---

5.2. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SB P	UW	Total hours
1	Healthy life style of a person	24						30	54
2	General physical fitness without equipment.			58				32	90
3	General physical training with weights.			78				32	110
4	Stretching			24				25	49
5	Testing Section			8				17	25

List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	Healthy life style	Working with physical education notebook	Results interpretation
2	General physical training with weights	Self-study	Show of a set of exercises
3	Stretching	Self-study	Show of a set of exercises

7. Forms of control

7.1. Current forms of control

- Practical: testing of physical qualities and abilities
- In writing: check of workbooks, tests, library-research papers, and notes

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass/fail test, examination, term paper)
Stages of the interim assessment

3. Stage – evaluation of physical training level using the point-rating system

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) ‘Set of the evaluation tools for the current control and interim assessment of students’.

8. Library and information materials of the course

8.1. Compulsory literature

1. Evseev, Yu. I. Physical culture [Electronic resource]: [for students and teachers of higher education. and Wednesday study. institutions] / Yu. I. Evseev. - 9th ed. - Rostov-on-Don: Phoenix, 2014 .-- 444 p. - Access mode: <http://www.studmedlib.ru/>
2. Workbook on physical culture [Electronic resource]: hands. to theor. classes / comp. S. L. Sovershaeva [and others]. - Arkhangelsk: Publishing house of the Northern State Medical University, 2016. - 60 p. - Access mode: <http://lib.nsmu.ru/lib/>

8.2. Supplementary literature

1. Zakharova, L. V. Physical culture [Electronic resource]: textbook / L. V. Zakharova, N. V. Lyulina, M. D. Kudryavtsev. - Krasnoyarsk: Siberian Federal University, 2017 .-- 612 p. - URL: <http://www.studentlibrary.ru/book/ISBN9785763836400.html>

8.3. List of the Internet resources required for mastering of the course (module)*

1. <https://www.sportedu.org.ua/index.php/PES-> Physical education of students

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
1	Moodle	General Medicine Elective course in physical culture and sports https://edu.nsmu.ru/course/view.php?id=1203	

8.5. The list of the software and information & reference systems

Операционная система

MS Windows Vista Starter

MS Windows Prof 7 Upgr

Офисный пакет

MS Office 2007

Другое ПО

7-zip

AdobeReader

Kaspersky Endpoint Security

9. Material and technical facilities necessary for the educational process*

No.	The name of the school's office	Location of the study room	List of the main equipment of the study room
1	Classroom for lecture-type lessons No. 2403 of Marine Medicine, administrative building, 4th floor	163000, Arkhangelsk, NSMU Troitsky av. 51	a) list of main equipment: A set of educational furniture (tables, chairs, screen, blackboard) teacher's workplace, workplaces for students for 300 places. b) sets of demonstration equipment speakers, monoblock, projector, screen c) a list of teaching aids: schemas, tables d) software used: Kaspersky endpoint Security. License number 26FE-191125-134819-1-8403. MS Office 2007. MS Win Starter 7. MS Windows Prof 7 Upgr. MS Windows Server CAL 2008 Device CAL. License number 46850049, unlimited Radmin Viewer 3. Radmin Server 3. Document number 11001793 Traffic inspector. License agreement No. 1051-08 dated 04/10/2008, unlimited
2	Aerobics hall No. 1024, main educational building, 0 floor, area 63.5 sq.m.	163000, Arkhangelsk, NSMU Troitsky av. 51	Vinyl dumbbells, gymnastic mats, gymnastic balls, gymnastic steel hoops, gymnastic weighted hoops, gymnastic sticks, jump ropes, benches, wall bars, step board

3	Room for storage and preventive maintenance of educational equipment No. 1030, main educational building, 0 floor	163000, Arkhangelsk, NSMU Troitsky av. 51	Ski boots, ski bindings, skis, ski poles, Nordic walking poles
4	Wrestling hall № 1029, main educational building, 0 floor, area 123.1 sq.m.	163000, Arkhangelsk, NSMU Troitsky av. 51	Swedish wall, jump ropes, gymnastic mats
5	Gym № 1017, main educational building, 0 floor, area 140 sq.m.	163000, Arkhangelsk, NSMU Troitsky av. 51	Exercise machines, dumbbells, weights, mats, benches, jump ropes, weights

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE COURSE (MODULE)

Discipline **Elective subjects of physical culture and sport. Sport games**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1,2,3 / 1,2,3,4,5,6**

Form of the interim assessment **Pass/fail test**

Department **of Physical Culture and Medical Rehabilitation**

Discipline workload **328** (academic hours)

Approved at the department meeting

Minutes No. 10

June 7th 2021

Head of the department



N.I. Ishekova

Author and compiler:

M.N. Repitskaya

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

The discipline is related to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects.

The discipline is related to prior subjects of the curriculum: physical culture and sports.

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive.

2. Goal and tasks of the mastering of the discipline

The goal of the physical culture course at a higher education institution is to develop the physical culture of students, as well as their capability to purposefully and on a reasonable methodological basis use various physical culture means, methods, and organizational forms allowing them to develop the personal health saving life activities required for the professional and personal formation.

In order to achieve this goal, the following tasks should be fulfilled during the course:

Mastering the system of practical skills that ensure the preservation and strengthening of health, mental well-being, development and improvement of psychophysical abilities, qualities and personality traits.

Ensuring general and professional physical fitness, which determines the psychophysical readiness of a student for a future profession.

To develop students' readiness to apply the sport and health improvement techniques to achieve a high level of physical health and maintain it during the study at a higher education institution and the further professional career.

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
Universal competencies (UC)-№ UK-7 Student is able to maintain the proper level of physical fitness to ensure full social and professional activity.	ИД -7.1. Student applies the principles of physical education to increase the adaptive reserves of the body and strengthen health ИД -7.2. Student chooses health-saving technologies to maintain a healthy lifestyle, taking into account the physiological characteristics of the body ИД -7.3. Student justifies competent planning of your working and free time for the optimal combination of physical and mental stress ИД -7.4. Student maintains an optimal level of physical fitness to ensure full social and professional activity

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 328 hours

Type of the academic work	Total hours	Term					
		1	2	3	4	5	6
Students' contact work with the teacher (total)	192	12	12	42	42	42	42
Including:							
Lectures (L)	24			6	6	6	6

Seminars (Sem.)	168	12	12	36	36	36	36
Practical classes (PC)							
Clinical practicals (CP)							
Laboratory-based practicals (LBP)							
Simulation-based practicals (SBP)							
Preparation for the examination (PE)							
Preparation for the credit (PC)							
Exam consultations (EC)							
Coursework (CW)							
Unsupervised work (UW) (total)	136	18	18	12	38	12	38
Examination control (EC)							
Total discipline workload	328	30	30	54	80	54	80

5. Contents of the course:

5.1. Contents of the sections of the course

No.	Name of the course section	Contents of the section
1	2	3
1	Basketball	Rules, technique and tactics of the game.
2	Volleyball	Rules, technique and tactics of the game.
3	Badminton	Rules, technique and tactics of the game.
4	Floorball	Rules, technique and tactics of the game.
5	Sport-related games	Kinds of sport-related games. Relays with additional objects.
6	Testing Section	Test of residual physical culture knowledge. Testing of movement qualities and abilities, Evaluation of physical development. Functional status evaluation. Filling-in of a student's athletic health passport (medical and athletic records). Point-rating system based end-of-term test on physical culture.
7	Healthy life style of a person	1. Physical education 2. Track and field. Basketball 3. Sports and healthy lifestyle 4. Modern types of fitness 5. Health Concept. Human Body Build. 6. Assessment of Physical Development and Functional Status of Human Body. Assessment of Physical Development. 7. Health Loss Risk Factors. 8. Profession-specific physical training (pspt) of specialists. 9. Hypodynamia. Physical Activity for Disease Prevention. 10. Energy Metabolism during Physical Exercises. Dynamics of Physiological State during Physical Activities.

		11. Influence of Physical Activity on Various Body Systems. Role of Physical Exercises. 12. Sports Injuries. Sports Injury Prevention.
--	--	---

5.2. Sections and types of studies

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
1	Basketball			54				28	82
2	Volleyball			56				40	96
3	Badminton			18				20	38
4	Floorball			24					24
5	Sport-related games			16				12	28
6	Testing Section							26	26
7	Healthy life style of a person	24						10	34

5. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	Sport-related games	Prepare sport-related game	Conducting a sport-related game in the group of students
2	Basketball	Learning of game rules	Participation and judgment in competitions
3	Volleyball	Learning of game rules	Participation and judgment in competitions

7. Forms of control

7.1. Current forms of control

- Practical: testing of physical qualities and abilities
- In writing: check of workbooks, tests, library-research papers, and notes

A theme list of abstracts, reports, essays, review papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Evaluation tools'.

7.2. Forms of the interim assessment (pass)

Stages of the interim assessment

3. Stage – evaluation of physical training level using the point-rating system

Questions for a pass are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

8. Library and information materials of the course

8.1. Compulsory literature

8.2. Supplementary literature

1. **Workbook on physical culture** [Электронный ресурс] : методический материал / S.

L. Sovershaeva [и др.]. - Архангельск : Изд-во Северного государственного медицинского университета, 2016. - 36 p. - Режим доступа: http://nb.nsmu.ru/cgi-bin/irbis64r_11/cgiirbis_64.exe?LNG=&Z21ID=&I21DBN=ELIB&P21DBN=ELIB&S21STN=1&S21REF=3&S21FMT=fullweb&C21COM=S&S21CNR=20&S21P01=0&S21P02=1&S21P03=I=&S21STR=elb/W83-286633

8.3. List of the Internet resources required for mastering of the course (module)*

№	Resources	URL address	Resource Annotation
1	International university sports federation	https://www.fisu.net/	ISU offers opportunity and inspiration to students around the world to play sport. The health, wellbeing, and experiences that students gain from sport help them become exemplary leading members of society. Hence, FISU's motto of Excellence in Mind and Body.
2	Volleyball advisors	http://www.volleyballadvisors.com	Includes volleyball game and practice tips - volleyball drills, skills, tactics, conditioning exercises and rules among others.
3	Basketball rules	https://www.fiba.basketball/	FIBA, the International Basketball Federation, is the world governing body for basketball. Founded by eight nations in 1932, we now bring together 212 National Basketball Federations from all over the world. A non-profit making organization, our mission is to develop and promote the game of basketball, uniting the wider basketball community, which counts more than 450 million players and fans.
4	World Health Organization	https://www.who.int/	Dedicated to the well-being of all people and guided by science, the World Health Organization leads

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
1	Moodle	General Medicine Elective course in physical culture and sports https://edu.nsmu.ru/course/view.php?id=1203	

8.5. The list of the software and information & reference systems

Операционная система

MS Windows Vista Starter

MS Windows Prof 7 Upgr

Офисный пакет

MS Office 2007

Другое ПО

7-zip

AdobeReader

Kaspersky Endpoint Security

9. Material and technical facilities necessary for the educational process*

No.	The name of the school's office	Location of the study room	List of the main equipment of the study room
1	Учебная аудитория для проведения занятий лекционного типа No 2403 Морской медицины, административный учебный корпус, 4 этаж	NSMU Troitsky av. 51	а) перечень основного оборудования: Комплект учебной мебели (столы, стулья, экран, доска) рабочее место преподавателя, рабочие места для обучающихся на 300 мест. б) наборы демонстрационного оборудования колонки, моноблок, проектор, экран в) перечень учебно-наглядных пособий: схемы, таблицы г) используемое программное обеспечение: Kaspersky endpoint Security. Номер лицензии 26FE-191125-134819-1-8403. MS Office 2007. MS Win Starter 7. MS Windows Prof 7 Upgr. MS Windows Server CAL 2008 Device CAL. Номер лицензии 46850049, бессрочно Radmin Viewer 3. Radmin

			Server 3. Номер документа 11001793 Traffic inspector. Лицензионное соглашение No1051- 08 от 10.04.2008,
2	Спортивный зал No 1421, главный учебный корпус, 4 этаж	NSMU Troitsky av. 51	площадь 466,8 кв.м Оборудование: Вышка металлическая, доска 1-элементная, кольца баскетбольные, маты гимнастические, скамейки гимнастические, стенка шведская, стойки волейбольные, табло спортивное, тренажёры силовые, турники к шведской стенке, щиты баскетбольные

MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION
Federal State Budgetary Educational Institution of Higher Education
"NORTHERN STATE MEDICAL UNIVERSITY"
of the Ministry of Healthcare of the Russian Federation

APPROVED

Dean of the International Faculty
of General Practitioner



A.K. Sherstennikova

June 16th 2021

SYLLABUS OF THE DISCIPLINE

Discipline **Russian language**

Field of training **31.05.01 General Medicine**

Year (s) of study / term (s) **1, 2, 3, 4 years (terms 1, 2, 3, 4, 5, 6, 7, 8)**

Form of the interim assessment **graded test (5th term), exam (8th term)**

Department **of foreign languages and Russian language as foreign**

Discipline workload **720** (academic hours) / **20** (credits)

Approved at the department meeting

Minutes No. 10

June 15th 2021

Head of the department



O.I. Vorobyova

Author and compiler:

Vorobyova Olga Ivanovna, Doctor of Philological Sciences, Professor of the Department
of foreign languages and Russian language as foreign

Zakharova Natalya Nikolaevna, Candidate of Philological Sciences, Associate Professor
of the Department of foreign languages and Russian language as foreign

Alekseeva Oksana Vitalievna, Candidate of Philological Sciences, Associate Professor of
the Department of foreign languages and Russian language as foreign

Maslova Olga Nikolaevna, senior lecturer of the Department of foreign languages and
Russian language as foreign

Arkhangelsk, 2021

1. Position of the discipline (module) within the structure of the educational program

The discipline is developed following the requirements of Federal State Education Standard (FSSES) for higher education in the field of 31.05.01 «General medicine».

The tasks of the mastering of the course:

1) READING TRAINING:

- development and improvement of reading skills (texts up to 1000 words, reading speed - 50-60 words per minute when studying reading; 70–80 words per minute when reading with a general coverage of the content).
- the formation of skills and abilities in reading texts of educational and professional and socio-political spheres.

2) WRITING TRAINING:

- teach written monologue on the proposed topic (socio-cultural, educational and professional topics);
- teach written monologue on the basis of read or heard text.

3) SPEAKING TRAINING:

in monologue speech

- teach yourself how to create coherent, logical statements in accordance with the proposed topic, including the educational and professional sphere;
- teach to build a monologue utterance based on the text you have read or heard.

in dialogic speech

- To teach to understand the content of the interlocutor's statements in a certain situation, to adequately respond to them, to start and conduct a dialogue.

4) LISTENING TRAINING:

- to teach to understand the main content of the monologue /dialogue with sufficient completeness (socio-cultural and educational professional areas of communication).

The discipline is related to the disciplines of the Basic part of the curriculum (or to the disciplines of the curriculum part formed by the participants of educational relations, including elective subjects and optional subjects)

The discipline is related to prior subjects of the curriculum:

The discipline is related to subsequent subjects of the curriculum:

The discipline is realized in the structure of the following types of professional activity tasks defined by the curriculum: preventive/diagnostic/organizational and administrative /research. This discipline is implemented in the first and second semesters of the first year of study and is a logical continuation of the course "Foreign language" (Russian language). The students develop the necessary language skills in reading, listening, speaking and writing at the elementary level (A1) and lay the foundations for mastering Russian as a foreign language at the basic level (A2).

Knowledge of Russian as a foreign language at an elementary level will satisfy the basic communicative needs of foreign students in the field of everyday communication and in the socio-cultural sphere, and will also contribute to their early adaptation in the Russian language environment.

2. Goal and tasks of the mastering of the discipline

The goal of mastering the discipline is the mastery by students of all types of speech activity (speaking, listening, reading, writing) in a volume corresponding to the threshold level of Russian language proficiency (B1 Threshold Level) in accordance with the requirements of the Federal State Educational Standard with the use of knowledge, skills and abilities in the field information technologies to improve speech skills, as well as increase the opportunities for independent mastery of the language of everyday communication and the language of the specialty.

Discipline objectives:

1. Formation of knowledge

- about the Russian language as the language of interethnic communication and the state language of the Russian Federation, about the stylistic differentiation of the modern Russian literary language and communicative tactics in everyday and professional communication;
- about the orthoepic norms of the modern Russian literary language, the peculiarities of the intonational design of the text;
- about the grammatical structure of the Russian language (paradigmatic and syntagmatic connections of words of different parts of speech; basic word-formation models of the Russian language, syntactic models of simple and complex sentences);
- about thematic groups (vocabulary of everyday communication in everyday, educational, socio-cultural situations; vocabulary of everyday and professional communication (in the amount of 2300 units);
- about the peculiarities of Russian general cultural and professional speech etiquette and basic communication tactics and strategies
- about the features of professional communication with different groups of patients;
- about the possibilities and ways of using electronic resources in the study of foreign languages (educational portals, websites, mobile applications, electronic translators and dictionaries).

2. Formation of skills (mastering different types of speech activity in a foreign language, as well as information resources in the field of learning foreign languages):

- read and understand texts of different types of speech (description, narration, reasoning), understand and extract basic and additional information from a small text on everyday and highly professional topics that use common words and constructions (reading);
- build written statements: a simple, coherent text on familiar topics or topics of interest to the participants in the communication, draw up separate parts of medical documentation (letter).
- to understand by ear the statements of the interlocutor, the content of dialogues and monologues in situations of daily and professional communication, as well as information programs related to personal or professional interests, subject to the observance of the literary norm and a low speed of speech delivery (listening);
- participate in dialogical everyday and professional communication, be able to answer / ask questions, in particular, about impressions, plans, recommendations, health status, symptoms, treatment methods, etc., using simple phrases; briefly state and argue your views (speaking);
- use different communication techniques, taking into account the situation and status of the communication participants: friendly, official, professional communication, including with patients with disabilities (communication);
- use electronic educational resources (sites, applications, electronic libraries) for the formation of speech skills, a solid mastery of the lexical and grammatical structure of the language; electronic translators and dictionaries for understanding / producing speech;
- understand in Russian the inscriptions and markings on equipment for people with disabilities.
- use electronic translators and dictionaries, electronic educational resources, linguistic simulators for the formation and consolidation of speech skills and the development of lexical and grammatical material.

3. Skills formation

- fluent reading and understanding of simple texts on familiar topics (monologues and dialogues);
- listening and understanding speech in the target language with an average speed of pronunciation;
- the use of the studied linguistic units in the classroom and in the conditions of real communication (everyday, socio-cultural, professional spheres of communication) for the production of oral and written statements;
- the use of educational portals, sites, video channels for the study of foreign languages for the formation of your own language learning strategy.

- effective use of information technologies for unsupervised work and homework when learning foreign languages (educational portals, websites, mobile applications, electronic translators and dictionaries, linguistic simulators, etc.)

3. List of the planned learning outcomes of the discipline (module) in connection to the planned outcomes of the mastering of the educational program

Codes of the formed competences	Indicator of the competence achievement
Universal competencies (UC)-№4 - capable to use modern communication technologies, including in a foreign (s) language (s), for academic and professional interaction	UC-4.1. Expresses his thoughts in Russian and foreign languages in business communication UC-4.2. Complies with the norms of Russian and foreign languages when speaking in public UC-4.3. Compiles texts in Russian and foreign languages related to professional activities UC-4.4. Uses modern information and communication tools and technologies UC-4.5. Drafts, translates, edits various academic and professional texts
Universal competencies (UC)-№5 Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	ID-5.1. Respects ethical standards and human rights ID-5.2. Analyzes and takes into account ethnocultural, national and confessional peculiarities in professional activity ID-5.3. Forms a tolerant environment for interaction when performing professional tasks ID-5.4. Overcomes barriers in the process of intercultural interaction
Universal competencies (UC)-№9 Able to use basic defectological knowledge in social and professional spheres	UC-9.1. Applies effective communication and creates a tolerant environment when interacting with people with disabilities and people with disabilities in social and professional activities UC-9.2. Provides medical, social and organizational support to people with disabilities when they receive medical care

*The list of professional competencies is based on the requirements of the professional standard "General medicine (district physician)", approved by the order of the Ministry of Labor and Social Protection of the Russian Federation of March 21, 2017 No. 293n

4. Volume of the discipline (module) and types of the academic classes:

Total workload of the course is 20 credits.

Type of the academic work								
Students' contact work with the teacher (total)	Total hours	Terms	Total hours	Terms	Total hours	Terms	Total hours	Terms
Including:								
Practical classes (PC)	108	1, 2	72	3,4	90	5, 6	72	7
Unsupervised work (UW) (total)	108	1, 2	72	3,4	90	5, 6	108	7

Total discipline workload	720
----------------------------------	------------

5. Course content:

5.1. Contents of the sections of the course

1st year

No	Name of the course section	Content of the section
	Repetition (basic information about the language obtained in the course "Foreign language")	<p>Repetition of basic information about the language, basic reading rules. Grammar. Noun: gender, number, singular case forms (nominative and prepositional). Thematic group "Names of persons by sex, age, profession, etc.", "Kinship terms". Russian proper names. Pronouns. Personal pronouns. Meaning, case forms and use. Possessive and demonstrative pronouns. Meaning, forms of genus and use. Concordance with a noun ..</p> <p>Adjective. Full adjectives: agreement in gender and number with the noun in the nominative case. Brief adjectives .. Thematic groups "Color", "Size", etc., evaluative adjectives.</p> <p>The verb as the center of the sentence. infinitive. Species-tense forms of the verb. Verb conjugations. Imperative.</p> <p>Numeral. Cardinal and ordinal numbers in the nominative case. Adverbs of place, time, measure and degree. predicative adverbs, interrogative adverbs ..)</p> <p>Prepositions, conjunctions, particles.</p> <p>Simple sentences: two-part and one-part. Order of words in a sentence. The concept of a subject and a predicate. Compound sentences. Interrogative sentences.</p> <p>Basic textbooks and information and communication resources (LMS Moodle, video conferencing ZOOM, communication channel - WhatsApp). Resources for independent work (applications and sites for learning Russian for foreign citizens).</p> <p>Linguistic simulators for the formation of auditory-pronunciation skills. Online electronic keyboard with Russian fonts. Text scoring software (ICE Book Reader Professional) Electronic translators (PROMT machine translation system, Yandex translator, Google Translate)</p> <p>Electronic explanatory dictionaries (ABBY Lingvo live) Educational YouTube channels for learning Russian as a foreign language: RikiStudy, RussianLessons.Net; Learn Russian with RussianPod101.com</p>
	Main course: (lexical minimum, grammar topics)	<p>Vocabulary</p> <p>Words, phrases, lexical phrases and constructions that provide</p> <ul style="list-style-type: none"> - generation and understanding of texts within the framework of the studied topics; - request and transfer of information of a domestic nature, as well as within the framework of the studied topics; - correct start and end of the conversation; - expression of their attitude to what is happening: assessment of a person, object, fact, event;

	<p>- expressions of the characteristics of a person, object, fact, event; - expressions of greeting, acquaintance, farewell; - expressions of gratitude, response to gratitude, apology, response to apology; - expressions of a request, proposal, invitation, consent / disagreement, refusal.</p> <p>The vocabulary is limited (780 units) *, but it is sufficient to meet the basic communication needs in specific everyday situations (everyday and socio-cultural spheres of communication).</p> <p>The lexical minimum includes linguistic terms, medical vocabulary and vocabulary of social, everyday and socio-cultural spheres of communication.</p> <p>Grammar: cases of nouns.</p> <p>Prepositional case of nouns.</p> <p>Meanings:</p> <ul style="list-style-type: none"> - в, на – place (Отец работает в банке.); - в, на – location (Книги на столе.) - о – object of speech, thought (Я читал о Москве.); - на – means of transportation (Мы ездим в университет на автобусе.); - на - object of influence (Студент работает на компьютере.); - в – time of action connected by words месяц, год, неделя (Я приехал в сентябре.) <p>Functions:</p> <ul style="list-style-type: none"> - object (Виктор рассказал о семье.); - circumstance of place (Я живу в Москве.); - circumstance of time (Я приехал в сентябре.). <p>Accusative case of nouns</p> <p>Meanings:</p> <p>a) without preposition:</p> <ul style="list-style-type: none"> - a person who has a direct object of action (Я знаю декана. Он читает журнал.); - designation of a person with the verb звать (Мою подругу зовут Ира.); - time of action : <ul style="list-style-type: none"> a) duration (Я изучаю русский язык месяц); <p>б) repeatability (Он ходит на стадион каждую неделю.) ;</p> <ul style="list-style-type: none"> - designation of the price after the verb стоить: (Книга стоит одну тысячу рублей.); <p>б) with prepositions:</p> <ul style="list-style-type: none"> в, на – direction (Набил идёт в магазин. Я еду в университет на автобусе.); в – time – day of the week, hour (Лекция в среду в 10 часов.) через – intersection (через мост, через улицу); через – time period (Студенты приедут через неделю). <p>Functions:</p> <ul style="list-style-type: none"> - logical subject (Моего брата зовут Иван.); - direct object with transitive verbs (Мой друг любит музыку.); - circumstance of place (Студенты идут в общежитие.); - circumstance of time (Мы не учимся в воскресенье. Я живу в России месяц.).
--	---

	<p>Accusative inanimate nouns. Transitive verbs читать, учить, слушать, смотреть, хотеть, делать, писать и др., which are used with accusative nouns without a preposition.</p> <p>Accusative animate nouns. Transitive verbs встретить, видеть, пригласить, ждать и др., which are used with accusative nouns without a preposition.: встретить преподавателя, видеть друга, ждать врача, пригласить гостя Formation and use of adjectives, possessive pronouns and ordinal numbers in the accusative case.</p> <p>Genitive case of nouns.</p> <p>Meanings:</p> <p>a) without preposition:</p> <ul style="list-style-type: none"> - the person who owns something (Эта книга моего друга.); - social family relations (Анна – секретарь декана. Борис – брат Виктора.); - the absence of a person, an object (У меня нет брата. В городе нет театра.); - definition of the subject (Улица Гагарина); - amount, measure <p>a) in combination with cardinal numbers 2-4, 5-20, in a strictly limited set (два брата, пять студентов,.2 часа, 5 рублей);</p> <p>б) with words сколько, много, мало, несколько (Сколько студентов в группе?);</p> <ul style="list-style-type: none"> - exact date of the event, action (Он родился 10-го мая 1999- го года.); - name of the month in the date (Сегодня первое сентября.). <p>б) with prepositions:</p> <ul style="list-style-type: none"> у – a person who owns something (У Виктора есть машина.); у – location associated with the person (Я был у врача.); около, (не)далеко/близко от – location (Мы живём недалеко от университета.); из, с, от - starting point of movement: place, face (Он приехал из Индии. Он пришёл со стадиона. Я пришёл от врача.); до – final destination of the movement (Как доехать до центра?); до, во время, после – time of action (Во время войны он работал врачом в госпитале.); от - object to move away from (Он отошёл от окна.); без – absence of anything (чай без сахара). <p>Functions:</p> <ul style="list-style-type: none"> - logical subject (У Рахула есть сестра.); - object when negated (У меня нет словаря.); - object (Я был на открытии выставки.); - definition of the subject (день спорта, кабинет декана); - circumstance of place (Он приехал из Англии.). - circumstance of time (Она пришла после обеда.); <p>Formation and use of adjectives, possessive pronouns and ordinal numbers in the genitive case.</p> <p>Dative case of nouns.</p> <p>Meanings:</p> <p>a) without preposition:</p>
--	---

	<p>- person who is in need of something (Мне надо позвонить.);</p> <p>- addressee of the action (Я написал письмо маме);</p> <p>- person experiencing a certain physical or emotional state (Мне нравится играть в футбол. Детям холодно.).</p> <p>- age of the person, the object (Сестре 20 лет. Городу 1000 лет.);</p> <p>б) with preposition:</p> <p>к – person as a target of movement (в ограниченном наборе) (Я иду к врачу.);</p> <p>к - person, object as the target of the approach (Мы подъехали к общежитию. Студент подошёл к преподавателю.);</p> <p>по – place of movement (Друзья гуляли по городу.);</p> <p>по – means of communication (Я говорю по телефону.)</p> <p>;по – sign of the subject in relation to the field of knowledge (Студенты слушали лекции по анатомии.);</p> <p>Function:</p> <p>- indirect object (Сампада позвонила подруге.);</p> <p>- logical subject (Мне нравится анатомия.);</p> <p>- circumstance of :</p> <p style="padding-left: 40px;">а) place (Я иду к врачу.);</p> <p>б) mode of action (Я получил письмо по факсу.);</p> <p>- definition (У студентов был экзамен по биохимии.).</p> <p>Dative case in impersonal constructions (дат. п. + нужно / можно / нельзя / трудно / легко. Dative case with verbs of movement</p> <p>Formation and use of adjectives, possessive pronouns and ordinal numbers in the case.</p> <p>Instrumental case of nouns.</p> <p>Meanings:</p> <p>а) with preposition:</p> <p>- characteristic, sign of a person, an object with the verbs быть , стать, работать (Я буду врачом. Отец работает инженером.);</p> <p>- object of interest, activities (Студенты занимаются спортом. Я интересуюсь анатомией).</p> <p>б) with prepositions:</p> <p>с – togetherness (Набил был в магазине с другом .);</p> <p>с – characteristic of the object (Я пью чай с молоком.);</p> <p>рядом с - location (Мой друг живёт рядом с аптекой.);</p> <p>перед – time (Консультация будет перед экзаменом.).</p> <p>Functions:</p> <p>- predicate (Он был врачом.);</p> <p>- object (Отец гулял с сыном.);</p> <p>- definition (Я люблю чай с сахаром.);</p> <p>- circumstance of:</p> <p style="padding-left: 40px;">а) place (Сестра живёт рядом с магазином.);</p> <p style="padding-left: 40px;">б) time (Перед экзаменом я много занимался.)</p> <p>Formation and use of adjectives, possessive pronouns and ordinal numbers in the instrumental case.</p> <p>Grammar: Verbs</p> <p>Conjugation of verbs. Perfect and imperfect verbs. Formation of</p>
--	---

	<p>perfective verbs using prefixes and suffixes: читать – прочитать, писать – написать, опаздывать – опоздать. Verbs that form perfect and imperfect form from different roots: говорить – сказать, брать – взять. Verbs: идти-ходить, ехать-ездить.</p> <p>Verbs of movement. Verbs that show different kinds of movement: идти-ходить, ехать-ездить, бежать-бегать, плыть-плавать, лететь-летать, нести-носить, везти-возить, вести-водить.</p> <p>Meanings of verbs of movement with prefixes</p> <ul style="list-style-type: none"> - по- - beginning of the movement (пойти, поехать); - при- - achievement of the ultimate goal of the movement (прийти, приехать); - у- - moving away from certain places (уйти, уехать); - в(о)-, в- - move inside (войти, въехать); - вы- - move outside (выйти, выехать); - под- - approaching a certain object (подойти, подъехать); - от- - moving a certain distance (отойти, отъехать); - пере- - moving from one place to another (перейти, переехать); - до- - reaching the final goal of the movement (доехать, дойти). <p>Forms of the perfect and imperfect form of the verbs of movement with the prefixes: приходиться-прийти, приезжать-приехать и т.д. The use of imperfect and perfect verbs of movement.</p> <p>Verbs of unidirectional and multidirectional movementидти (пойти) – ходить, ехать (поехать) – ездить в in the present, past future tense and imperative mood.</p> <p>Verbs of movement combined with nouns.Prepositions В and НА with nouns in the accusative case when indicating the direction (в театр, вы гости, на вокзал, на день рождения и др.) and in the prepositional case when indicating the type of transport (на [в] машине, на [в] автобусе, на [в] такси и др.)</p> <p>verbs in combination with animate nouns in the dative case with the preposition К indicating the direction (идти к врачу, к другу) и предлогом ОТ + родительный падеж с противоположным значением (идти от врача, от друга)</p> <p>Grammar - Syntax</p> <p>Simple and complex sentences. Simple and complex-composed sentences on an extended set of lexical-grammatical material. Complex sentences (explanatory, attributive, temporary, conditional, target).</p> <p>Basic textbooks and information and communication resources (LMS Moodle, video conferences ZOOM, communication channel - WhatsApp). Resources for independent work (applications and sites for learning Russian for foreign citizens).Electronic translators (PROMT machine translation system, Yandex translator, Google Translate)</p> <p>Electronic explanatory dictionaries (ABBY Lingvo live) Educational YouTube channels for learning Russian as a foreign language: RikiStudy, RussianLessons.Net; Learn Russian with RussianPod101.com</p>
Speech topics (dialogues, texts on everyday,	<p>Speech practice:</p> <p>Conversational topics: "My working day", "My day off", "Birthday", "Russian language lesson", "My future profession"</p> <p>"About myself", "My family", "My friend" ("My girlfriend") - expansion</p>

	educational, professional topics)	<p>of the topic.</p> <p>Dialogues: "Where do you live?", "Free time: what are you doing in the evening / on Sunday?", "In the store: I go to the store for groceries / I buy a gift", "In the city / on the bus", "In the cafeteria", "In the library", "Calling a taxi", "At the airport / check-in"</p> <p>Working with texts (topics) corresponding to the profile of training: "Jeswin is sick", "Polyclinic of NSMU", "Jeswin goes to the pharmacy", "Disease of a friend", "Healthy lifestyle".</p> <p>Dialogues: "At the reception", "At the doctor's appointment", "At the pharmacy", "Calling an ambulance."</p> <p>Speaking:</p> <p>Monologue speech: A story on a given topic.</p> <p>Dialogue speech: influence, negotiate, maintain dialogue in situations related to the topics studied.</p> <p>Listening:</p> <p>Understand information by ear (topic, main idea); understand the main content of the dialogue; listen to a monologue and dialogical speech with the selection and subsequent discussion of the main ideas. Specially compiled or adapted texts are used, built on the basis of the lexical and grammatical material of this level.</p> <p>Reading:</p> <p>Types of reading: reading with general content coverage, learning reading, browsing and searching reading.</p> <p>The prevailing topic is relevant for the social and social and cultural spheres of communication. The texts are used corresponding to the profile of training (texts of professional topics).</p> <p>Letter:</p> <p>Based on the text read</p> <ul style="list-style-type: none"> - create a written monologue of a reproductive nature in accordance with the communicative task; - using questions, create a written statement of a productive nature on the proposed topic in accordance with the communicative attitude. <p>Text type: narration or message. Specially compiled texts are used based on the studied lexical and grammatical material. The volume of the presented text: up to 100 words. There are no unfamiliar words in the text. The volume of the created text: no more than 5 sentences.</p> <p>Basic textbooks and information and communication resources (LMS Moodle, video conferencing ZOOM, communication channel - WhatsApp). Resources for independent work (applications and sites for learning Russian for foreign citizens).</p> <p>Electronic translators (PROMT machine translation system, Yandex translator, Google Translate)</p> <p>Electronic explanatory dictionaries (ABBY Lingvo live) Educational YouTube channels for learning Russian as a foreign language: RikiStudy, RussianLessons.Net; Learn Russian with RussianPod101.com.</p>
--	-----------------------------------	--

2nd year

№	Name of the	Contents of section
---	-------------	---------------------

	discipline section	
1	2	3
1	<p>Repeat the material learnt in the first year</p> <p>Basics of professional communication</p>	<p>Input control</p> <p>Revision of grammar material of the 1st course: prepositional-singular system of nouns, adjectives and pronouns (demonstrative and possessive)</p> <p>Plural Nominative case of nouns, adjectives, demonstratives, and possessive pronouns</p> <p>Verbs of movement (идти – ходить, ехать – ездить)</p> <p>Time constructs (когда? Как долго? Как часто?)</p> <p>The text " M. V. Lomonosov, the great Russian scientist "(see text in the App)</p> <p>Vocabulary: название практики, больница, стационар, приемное отделение, терапевтическое отделение, помещения в отделении, мебель, сантехническое оборудование, медицинский персонал, одежда и обувь медперсонала, медицинские предметы, белье постельное и нательное, объективные показатели физического состояния пациента (рост, вес, пульс, давление, температура)</p> <p>Conversational topic "Preparing for practice in the hospital"</p> <p>Control under section 1</p>
2	<p>Genitive plural of nouns, adjectives, possessive pronouns, and demonstrative pronouns.</p>	<p>Nouns, adjectives, and demonstrative and possessive pronouns in the genitive plural</p> <p>Use of the pronoun "себя"</p> <p>Numerals + nouns (Genitive plural)</p> <p>Text "Doctor Elena" (textbook by Yu. G. Ovsienko)</p> <p>Words for body parts and internal organs</p> <p>Constructions «Я болею», «У меня болит что?», «У меня болит где?», «Боль где?», «Боль какая?», «Как ты себя чувствуешь?»</p> <p>Conversational topic "At a doctor's appointment"</p>

	Basics of professional communication	Control under section 2
3	Accusative plural of nouns, adjectives, possessive pronouns, and demonstrative pronouns.	<p>Nouns, adjectives and demonstrative and possessive pronouns in the Accusative case plural</p> <p>Groups of verbs (идти – ходить, видеть – смотреть, слышать – слушать, брать/взять, покупать / купить, показывать / показать, сдавать / сдать, есть/ съесть, пить / выпить, лечить/вылечить, чистить / вычистить, выписывать/выписать, мыть / вымыть, принимать / принять, лечить/вылечить)</p> <p>The text "Dr. Lisa" (see text in the App)</p> <p>Vocabulary on the topic «Острые респираторные заболевания»: простуда, простудиться, повышенная температура, насморк, кашлять (кашель), чихать (чихание), осложнение, измерять/измерить (что?)</p> <p>The construction “ при + prepositional case”</p> <p>The text "Острые респираторные заболевания " (see text in the App)</p> <p>Conversation topic «Colds Prevention»</p>
	Basics of professional communication	Control under section 3
4	Prepositional plural of nouns, adjectives, possessive pronouns, and demonstrative pronouns	<p>Nouns, adjectives, and demonstrative and possessive pronouns in the Prepositional plural</p> <p>Verbs: находиться, родиться, жить, лечиться, рассказывать/рассказать, брать/взять, покупать/ купить, спрашивать/спросить, выступать/ выступить, думать/подумать</p> <p>Text of "М. В. Пиккель " (see the text in the appendix)</p> <p>Vocabulary on the topic «У меня болит горло» (шея, глотать (глотание), воспаляться (воспаление), гной (гнойный), запах, полоскать (полоскание), слюнные железы, нёбо, слюна, лимфатические узлы, повязка)</p> <p>The text "Angina" (see text in the App)</p>
	Basics of professional communication	Control under section 4
5	Dative case of	Nouns, adjectives, and demonstrative and possessive pronouns in the

	<p>plural nouns, adjectives, possessive and demonstrative pronouns</p> <p>Basics of professional communication</p>	<p>Dative plural</p> <p>Sentences with the word «который», которая, которое, которые</p> <p>The "надо, нужно + infinitive" construction</p> <p>The text "Anton Pavlovich Chekhov" (see text in the App)</p> <p>Verbs: давать / дать, объяснять / объяснить, назначать / назначить, посылать / послать, говорить / сказать, идти – ходить к (кому?)</p> <p>Vocabulary on the topic "Bronchitis": легкие, бронхи, дыхательные пути, сухой/влажный кашель, хрипы, мокрота, слизистая оболочка, табачный дым, назначать (назначение), возбуждать (возбудитель), дышать (дыхание), защищать (защита) etc.</p> <p>The text "Bronchitis" (see text in the App)</p> <p>Conversational topic of the "Healthy Lifestyle" block: "Bad habits"</p> <p>Control under section 5</p>
6	<p>Instrumental case of plural nouns, adjectives, possessive and demonstrative pronouns</p> <p>Basics of professional communication</p>	<p>Nouns, adjectives and demonstrative and possessive pronouns in the Instrumental case plural</p> <p>Verb groups: заниматься / заняться, встречаться / встретиться, идти – ходить, знакомиться / познакомиться, здороваться / поздороваться, прощаться / попрощаться, питаться, болеть / заболеть, лечиться</p> <p>Text "The city on the banks of the Northern Dvina" (see text in the App)</p> <p>Flu vocabulary: инкубационный период, инфекция, интоксикация, суставы, мышцы, озноб, слабость, потливость, вялость, осложнение, постельный режим, обильное питье, препараты (жаропонижающие, болеутоляющие, противовирусные), влажная уборка, маска и т.д., etc.</p> <p>The text "Flu" (see text in the App)</p> <p>Colloquial topic "Care for infectious patients"</p> <p>Control under section 6</p>
7	Verbs of movement	Unidirectional and multidirectional verbs

	Basics of professional communication	<p>Verbs without prefixes: идти – ходить, ехать - ездить, and with prefixes: прийти, уйти, приехать, уехать</p> <p>The "чтобы + infinitive" construction</p> <p>The text of " V. A. Kudryavtsev "(see text in the App)</p> <p>Vocabulary on the topic "Stomach aches" (живот, желудок, кишечник, слизистая оболочка, питание, нарушение стула, тошнота, рвота, плохой аппетит)</p> <p>The text "Gastritis" (see text in the App)</p> <p>Conversational topic of the "Healthy Lifestyle" block: "Proper nutrition"</p> <p>Control under section 7</p>
8	<p>Degrees of comparison of adjectives and adverbs</p> <p>Basics of professional communication</p>	<p>Comparative degree of adjectives and adverbs (больше/меньше, лучше / хуже, дальше / ближе, дороже / дешевле, старше / младше, теплее / холоднее, труднее / легче, громче / тише, реже / чаще)</p> <p>Superlative degree of adjectives (самый+ adjective)</p> <p>Text "Medical care in Russia" (see text in the App)</p> <p>Vocabulary on the topic " Allergy "(аллергия аллерген, зуд, покраснение, слезы, наследственность, иммунитет, экология, образ жизни)</p> <p>Forms of the imperative mood (ешьте, не пейте, etc.)</p> <p>The text "Allergy" (see text in the App)</p> <p>Conversational topic of the "Healthy Lifestyle" block: "Compliance with sanitary and hygienic standards"</p> <p>Control under section 8 9</p>
9	Generalization of the studied material	Groups of professional vocabulary words: body parts, internal organs, symptoms, diseases, doctors, drug groups

	Final control	Lexico-grammar test
--	---------------	---------------------

3rd year

№ п/п	Name of the discipline section	Contents of section
	<p>Repetition of the material studied in the first year. The profession of a doctor.</p> <p>Patient's medical record</p>	<p>Entrance control</p> <ul style="list-style-type: none"> - Lexico-grammatical test (Moodle). <p>Repetition of grammatical material of the 2nd course:</p> <ul style="list-style-type: none"> - Fundamentals of professional communication (medical vocabulary); - Genitive plural of nouns, adjectives, possessive and demonstrative pronouns. - Accusative plural of nouns, adjectives, possessive and demonstrative pronouns. - Prepositional plural of nouns, adjectives, possessive and demonstrative pronouns - Dative plural of nouns, adjectives, possessive and demonstrative pronouns - Instrumental plural of nouns, adjectives, possessive and demonstrative pronouns - Verbs of movement - Comparison of adjectives and adverbs <p>Control work on section No. 1.</p>
	<p>First practice at a medical university</p> <p>Grammar:</p> <p>Verbs.</p> <p>Specific pairs of verbs.</p> <p>Verbs with a particle –ся.</p> <p>Movement verbs.</p> <p>Basics of professional communication</p>	<p>Specific pairs of verbs of different groups.</p> <p>Verbs with a particle –ся.</p> <p>Reflexive verbs.</p> <p>Passive verbs.</p> <p>Movement verbs with different prefixes.</p> <p>Specific pairs of verbs of movement.</p> <p>Label constructions "Appeal", "Ways to attract attention" Medical terms Professional text "First practice at a medical university" (part 1)</p> <p>Control work on section No. 2.</p>
	<p>Verb forms. The verbal participle.</p> <p>Participle.</p> <p>Basics of professional communication</p>	<p>Word formation of verb forms (participles and participles). Participle sentence = sentence with the word "который". Exam topic "Practice in the hospital".</p> <p>Control work for section No. 3</p>
	<p>Musculoskeletal system. Bones and Muscles.</p> <p>Grammar: Active, passive constructs.</p> <p>Basics of professional communication</p>	<p>Short forms of participles. Examples of the use of short participles and verbs in passive constructions.</p> <p>Label constructions "Gratitude", "Apology"</p> <p>Medical terms Professional text "Musculoskeletal system. Bones and Muscles"</p>

		Control work on section No. 4.
	<p>Musculoskeletal system. The structure of the human skeleton Grammar: Expressing tense in simple and complex sentences</p> <p>Basics of professional communication</p>	<p>Expression of tense by a noun in the accusative case without a preposition and with a preposition (на, за, через).</p> <p>Expression of time by a noun in the genitive case with a preposition (до, после, во время).</p> <p>Expression of time by nouns in the instrumental case with the preposition "перед".</p> <p>Expression of tense with nouns in the dative case with the preposition "по" (по вторникам)</p> <p>Time constructions «за... до ...», «через ... после...».</p> <p>The adverb of time.</p> <p>Expression of time in a complex sentence.</p> <p>The use of conjunctions «до того как, после того как, перед тем как, как только и т.д..</p> <p>Medical terms</p> <p>Professional text "Musculoskeletal system. The structure of the human skeleton "</p>
	<p>Musculoskeletal system. Human skeleton. Posture.</p> <p>Grammar: Expressing cause and effect in a simple and complex sentence.</p> <p>Basics of professional communication</p>	<p>Expression of cause in a simple sentence (из-за, от + сущ. в Р.п.; благодаря, по + сущ. в Д.п.).</p> <p>Expression of reason in a simple sentence (предлоги: из-за того что, благодаря тому что, потому что, так как)</p> <p>Expression of effect.</p> <p>Medical terms.</p> <p>Professional texts «Musculoskeletal system. Human skeleton. Posture.</p>
	Control slice of knowledge for the 5th semester	Doctor-patient dialogue, final test
	<p>Musculoskeletal system. Diseases and injuries.</p> <p>Grammar: Expressing purpose and condition in a simple and complex sentence.</p> <p>Basics of professional communication</p>	<p>Expressing purpose in a simple sentence (предлог + сущ. в Р.п, Т.п, В.п.)</p> <p>Expression of purpose in a complex sentence.</p> <p>Constructions «чтобы + прош. вр.», «чтобы + инф.»</p> <p>Expressing condition in a simple sentence (при + сущ. в П.п., в случае , при наличии , при отсутствии + сущ. в Р.п.)</p> <p>Expressing condition in a complex sentence</p> <p>Types of conditional relationships: real, potential and surreal conditions.</p> <p>Medical terms Professional text «Musculoskeletal system. Diseases and</p>

		injuries»
	Doctors of Russia. Grammar: Expressing concession in a simple and complex sentence. Basics of professional communication	Expressing concession in a simple sentence (несмотря на + сущ. в В.п) Expressing concession in a complex sentence (союзы: несмотря на то что, хотя) Etiquette constructions "Regret, sympathy" Medical terms Professional texts "Doctors of Russia"
	Dative impersonal constructions Basics of professional communication	Dative case of nous, pronouns, adjectives Можно, надо, нужно, нельзя + инф. Word «нельзя» in different meanings Д.п. + трудно, легко + инф. Д.п. + безличн.. глаголы (осталось, казалось и т.д.) + инф. Medical terms Exam topic "Doctors of Russia"
	Repetition of the material learned. Exam topics "Doctors of India", "Healthy lifestyle", "Physical inactivity" Basics of professional communication	Prepositional-case system The kind of the verb. Impersonal forms of the verb. Simple and complex sentence. Expression of different meanings in a simple and complex sentence. Formation of verbal nouns. Control on the topic "Medical vocabulary"
	Module control	Summing up the course. Acceptance of debts on examination topics. Final control work (lexical and grammatical tasks, drawing up questions to the proposed text)

4th year

No.	Name of the course section	Contents of the section
	SECTION 1.1. Conversation topic "Diseases of the XX and XXI centuries." Fundamental systems of human organs. Human skin.	COMMUNICATION PRACTICE: 1. Conversation topic ""Diseases of the XX and XXI centuries." "Smallpox". "Spanish influenza". "AIDS: the XXI century plague". Lexicaltools: Чума, испанский грипп, оспа, синдром приобретённого иммунного дефицита человека, умереть от / страдать от (чего? Р.п.) болеть / заболеть (чем? Т.п.), заразиться (чем? Т.п.) является чем; исследуется кем; определяется чем; характеризуется чем; предупредить = предотвратить (что? В.п.)

		<p>2. Fundamental systems of human organs. Human skin, its structure and functions. General surveying of the skin. Working with video materials "Human skin".</p> <p>Lexicaltools:</p> <p>Кожный покров, наружный покров тела, кожа, потоотделение, мочеви́на</p> <p>наружный слой / эпидермис, средний слой / дерма, внутренний слой / подкожная жировая клетчатка /гиподерма</p> <p>защитная функция, терморегуляторная функция, выделительная функция</p> <p>вредное воздействие,</p> <p>предохранять от (чего?), защищать от (чего?), защищать от ультрафиолетовых лучей</p> <p>GRAMMAR:</p> <p>Word-building structure of noun and adjective. Prepositional-case system of nouns, adjectives, pronouns in the singular and plural.</p> <p>(The grammar is repeated, its studying is more profound and it's based on the texts of medical topics in this section. Thus, a functional-communicative approach in teaching grammar is implemented.)</p> <p>READING: Professionally oriented texts "What is plague?"</p>
	<p>SECTION 1.2.</p> <p>Conversation topic "Diseases of the XX and XXI centuries."</p> <p>Fundamental systems of human organs.</p> <p>Human skin.</p>	<p>COMMUNICATION PRACTICE:</p> <p>Conversation topic "Diseases of the XX and XXI centuries.""Cardiovascular diseases". "Diabetes". Osteochondrosis. "Oncological diseases". "Obesity", "Depression".</p> <p>Lexicaltools:</p> <p>причины, факторы, патология,</p> <p>характерный, двигательный, правильный / неправильный, вредный / полезный, опасный;</p> <p>сердечно-сосудистые заболевания, малоподвижный образ жизни, инфаркт, инсульт, ишемическая болезнь сердца, сахарный диабет, переедание, сладкая пища;</p> <p>остеохондроз, заболевания позвоночника, межпозвоночные диски, связки, костная ткань, мышечная ткань;</p> <p>опухоль, онкологический, аллергический, доброкачественный, злокачественный;</p> <p>онкологические заболевания; переедание, повышенное</p>

		<p>давление;</p> <p>сниженное настроение, концентрация внимания</p> <p>2. Fundamental systems of human organs. Skin diseases. Working with video materials “Healthy means wealthy! Summer epidemic: scabies ”(05/25/2018, 26-34 min).</p> <p>Lexical tools:</p> <p>цвет кожи, окраска кожи, патологическая окраска кожи, гиперемия, покраснения на коже, влажность кожи, сухость кожи, чистые покровы;</p> <p>бледная, синюшная (цианоз кожи), розовая, бронзовая, красная, землистая, желтушная / иктерическая кожа;</p> <p>пятна, папулы, волдыри, пузыри, пузырьки, чешуйки, ссадины, трещины, корки, язвы.</p> <p>GRAMMAR: Word-building structure of noun and adjective. Prepositional-case system of nouns, adjectives, pronouns in the singular and plural.</p> <p>(The grammar is repeated, its studying is more profound and it’s based on the texts of medical topics in this section. Thus, a functional-communicative approach in teaching grammar is implemented.)</p> <p>READING: Professionally oriented texts: 'What should everyone know about diabetes? ', 'What should we know about cardiovascular diseases?'</p>
	<p>SECTION 1.3.</p> <p>Conversation topic</p> <p>"Diseases of the XX and XXI centuries."</p> <p>Fundamental systems of human organs.</p> <p>Human skin.</p>	<p>COMMUNICATION PRACTICE:</p> <p>1. Conversation topic "Diseases of the XX and XXI centuries." Revising the topic.</p> <p>Lexical tools: revising the vocabulary given on the previous classes.</p> <p>2. Fundamental systems of human organs. Skin diseases. Dialog “At the dermatologist’s attendance”.</p> <p>Lexical tools:</p> <p>симптомы заболеваний кожи: зуд, высыпания, чувство жжения, чувство покалывания, шелушение кожного покрова, бессонница;</p> <p>местное лечение, аэрозоли, мази, пасты, масла, компрессы, пластыри, лечебные мыла.</p> <p>GRAMMAR: Derivational structure of the verb. The imperative mood of verbs. Verbs in an imperative.</p> <p>(The grammar is repeated, its studying is more profound and it’s based on the texts of medical topics in this section. Thus, a functional-communicative approach in teaching grammar is</p>

		<p>implemented.)</p> <p>READING: Professionally oriented texts: What should you know about oncology?" / "What is the danger of pediculosis?"</p> <p>Control according to section 1. Lexico-grammatical test / Control work.</p>
	<p>2.1. Conversation topic "Fundamental principles of medical ethics".</p> <p>Fundamental systems of human organs.</p> <p>Excretory system.</p>	<p>COMMUNICATION PRACTICE:</p> <p>1. Conversation topic "Fundamental principles of medical ethics". "The profession of a doctor."</p> <p>"Professional behavior of a doctor"</p> <p>Lexical tools:</p> <p>Медицинская этика, правила и нормы поведения медицинского персонала, сформулировать принципы медицинской этики;</p> <p>Человеколюбие, сострадание, милосердие, доброта, отзывчивость, внимательное отношение к больному;</p> <p>речь доктора, чувство такта, поднять больному настроение, хранить врачебную тайну, совершенствоваться в своей профессии, читать научную литературу, участвовать в форумах врачей, обмениваться опытом;</p> <p>опрятный вид, чистый халат, чистая шапочка, аккуратная сменная обувь, чистые руки, коротко остриженные ногти.</p> <p>2. Fundamental systems of human organs. Excretory system. Working with video materials: Healthy means wealthy! What you need to know about the kidneys? (05/30/2017)</p> <p>Lexical tools:</p> <p>Выделительная система, продукты метаболизма, углекислый газ, азотсодержащие вещества, аммиак, мочевина, креатинин, мочевая кислота;</p> <p>Органы выделения, почки, лёгкие, желудочно-кишечный тракт, потовые железы, слюнные и желудочные железы, поджелудочная железа, кишечные железы</p> <p>GRAMMAR: Derivational structure of the verb. Imperfective and perfective verbs.</p> <p>(The grammar is repeated, its studying is more profound and it's based on the texts of medical topics in this section. Thus, a functional-communicative approach in teaching grammar is implemented.)</p> <p>READING: Professionally oriented texts: "Medical ethics: every doctor should know about it"</p>
	2.2. Conversation topic "Fundamental	COMMUNICATION PRACTICE:

	<p>principles of medical ethics". Fundamental systems of human organs. Excretory system.</p>	<p>1.Conversation topic "Fundamental principles of medical ethics". "The Hippocratic Oath". "Contemporary Issues of Medical Ethics"</p> <p>Lexicaltools: даватьклятвуГиппократ, древняяпрофессиональнаяклятваврача, взаимоотношения, деятельность, межличностный, обязанность, ответственность; физические и нравственные страдания, привести к физическим и нравственным страданиям пациентов; пересадка органов, донор, реципиент, <u>эвтаназия</u>.</p> <p>2. Diseases of the excretory system. Working with video materials: Healthy means wealthy! Urolithiasis disease. 02.10.2018 / Healthy means wealthy! Urinary infections. Necessary to treat! 01.10.2018</p> <p>Lexicaltools: пиелонефрит, мочекаменная болезнь почек, опухоли, уретрит, цистит воспалительный процесс, возбудитель, очаг воспаления, стафилококк, стрептококк, энтерококк, болезненное мочеиспускание общийанализмочи</p> <p>GRAMMAR: Derivational structure of the verb. Imperfective and perfective verbs. (The grammar is repeated, its studying is more profound and it's based on the texts of medical topics in this section. Thus, a functional-communicative approach in teaching grammar is implemented.)</p> <p>READING: Professionally oriented texts: "The underlying causes of kidney disease" / "Why do people need salt?"</p>
	<p>2.3. Conversation topic "Fundamental principles of medical ethics".</p> <p>Fundamental systems of human organs. Excretory system.</p>	<p>COMMUNICATION PRACTICE:</p> <p>1.Conversation topic "Fundamental principles of medical ethics". Revising the topic.</p> <p>Lexicaltools: revising the vocabulary given on the previous classes.</p> <p>2.Fundamental systems of human organs. Excretory system. Diseases of the excretory system. Dialogue "At the Nephrologist's Attendance".</p> <p>Lexical tools: болит под рёбрами, болит под ложечкой, режет в</p>

		<p>боку, боль отдаёт иррадирует вправо, кожный зуд, желтушность кожи, горечь во рту, субфебрильная температура, боль резкая, острая, колющая, режущая, приступообразная.</p> <p>GRAMMAR: Modal verbs. Constructions МОЖНО/ НУЖНО/ СЛЕДУЕТ/НЕОБХОДИМО + infinitive.</p> <p>(The grammar is repeated, its studying is more profound and it's based on the texts of medical topics in this section.)</p> <p>READING: Professionally oriented texts "What is useful and what is bad for the kidneys" / "Why do people have different skin colors?"</p> <p>Control according to section 2. Lexico-grammatical test / Control work.</p>
--	--	---

5.2. Sections and types of studies

1st year

No.	Name of the course section	L	S	P	CP	LBP	SBP	UW	Total hours
1	Repetition (basic information about the language obtained in the course "Foreign language")			10				10	20
2	Main course: (lexical minimum, grammar topics)			58				58	116
3	Speech topics (dialogues, texts on everyday, educational, professional topics)			40				40	80
				108				108	216

2nd year

№	Name of the discipline section	L	S	P	CP	LBP	S	UW	Total hours
1	Repeating the material learned in the first year Basics of professional communication			9				9	18
2	Genitive plural of nouns, adjectives, possessive pronouns, and demonstrative							9	18

	pronouns. Basics of professional communication			9					
3	Accusative plural of nouns, adjectives, possessive pronouns, and demonstrative pronouns. Basics of professional communication			9				9	18
4	Prepositional plural of nouns, adjectives, possessive pronouns, and demonstrative pronouns Basics of professional communication			9				9	18
5	Dative case of plural nouns, adjectives, possessive and demonstrative pronouns Basics of professional communication			8				8	16
6	Instrumental case of plural nouns, adjectives, possessive and demonstrative pronouns Basics of professional communication			8				8	16
7	Verbs of movement Basics of professional communication			8				8	16
8	Degrees of comparison of adjectives and adverbs Basics of professional communication			8				8	16
9	Generalization of the studied material. Final control			4				4	8

3rd year

№ п/п	Name of the discipline section	L	S	P	CP	LBP	S	UW	Total hours
1)	Repetition of the material studied in the first year. The profession of a doctor. Patient's medical record			6				6	12
2.	First practice at a medical university Grammar: Verbs. Specific pairs of verbs. Verbs with a particle –ся. Movement verbs. Basics of professional communication			12				6	18

3.	Verb forms. The verbal participle. Participle. Basics of professional communication			6				6	12
4.	Musculoskeletal system. Bones and Muscles. Grammar: Active, passive constructs. Basics of professional communication			9				9	18
5.	Musculoskeletal system. The structure of the human skeleton Grammar: Expressing tense in simple and complex sentences Basics of professional communication			9				9	18
6.	Musculoskeletal system. Human skeleton. Posture. Grammar: Expressing cause and effect in a simple and complex sentence. Basics of professional communication			9				9	18
7.	Control slice of knowledge for the 5th semester			3				3	6
8.	Musculoskeletal system. Diseases and injuries. Grammar: Expressing purpose and condition in a simple and complex sentence. Basics of professional communication			9				9	18
9.	Doctors of Russia. Grammar: Expressing concession in a simple and complex sentence. Basics of professional communication			6				6	12
10.	Dative impersonal constructions Basics of professional communication			6				6	12

11.	Repetition of the material learned. Exam topics "Doctors of India", "Healthy lifestyle", "Physical inactivity"			12				15	27
	Basics of professional communication								
12.	Module control			3				6	9

4th year

№	Name of the course section	P	UW	Total hours
1	2	4	8	9
1	Conversation topic "Diseases of the XX and XXI centuries." Fundamental systems of human organs. Human skin.	36	54	90
2	Conversation topic "Fundamental principles of medical ethics". Fundamental systems of human organs. Excretory system.	36	54	90
	TOTAL (HOURS)	72	108	180

6. List of teaching materials for the course unsupervised work of students (including the use of e - learning opportunities, distance learning technologies (Moodle))

1st year

No.	Name of the course section	Types of the unsupervised work	Forms of control
1	Repetition (basic information about the language obtained in the course "Foreign language")	<p>Repetition and consolidation of systemic phonetic and spelling skills using:</p> <ul style="list-style-type: none"> - exercises for the formation of auditory-pronunciation skills (listening and reading), including using IT: - site for students of NSMU https://russianlaunch.blogspot.com/p/phonetics.html - Talk2Russia mobile application (Phonetics section); - trainers of Russian pronunciation: http://learnrussian.rt.com/phonetics/ https://easypronunciation.com/ru/practice-russian-pronunciation-online http://www.russianforeveryone.com/Rufe/Lessons/Course1/Introduction/IntrUnit1/IntrUnit1.htm (IR training) <p>Reading text with preliminary preparation using text-to-speech software (ICE Book Reader Professional)</p> <p>2. Repetition and consolidation of the lexical and</p>	<p>Testing the reading technique. Vocabulary dictation. Checking written assignments in workbooks, oral questioning in the lesson. Control exercises in</p>

		<p>grammatical minimum using IT (interactive game tasks, exercises, simulators):</p> <ul style="list-style-type: none"> - grammar https://learningapps.org/5714683 https://wordwall.net/play/7554/255/347 https://wordwall.net/play/9302/126/426 https://wordwall.net/play/9303/553/992 https://wordwall.net/play/9390/873/554 https://quizlet.com/561076265/match?i=3ba7pu&x=1Kqt https://wordwall.net/play/9575/043/720 - vocabulary https://wordwall.net/play/7339/901/959 https://wordwall.net/play/8219/686/966 https://quizlet.com/ru/553744506/%D0%9A%D0%B0%D0%BA%D0%BE%D0%B9-%D1%86%D0%B2%D0%B5%D1%82- flash-cards /? x = 1jqt https://edu.nsmu.ru/mod/quiz/attempt.php?attempt=1064859&cmid=72942 	the lesson. Checking tasks in LMS Moodle. Testing.
2	Main course: (lexical minimum, grammar topics)	<p>Mastering vocabulary and grammar:</p> <p>Doing homework (writing exercises, reading texts on the studied lexical and grammatical material).</p> <p>Textbooks and tutorials:</p> <ol style="list-style-type: none"> 1. Овсиенко Ю.Г. Русский язык для начинающих (для говорящих на английском языке) [Текст] : [учебник]/ Ю. Г. Овсиенко Кн. 1: Русский язык, 2019. - 472 с.: ил. 2. Алексеева О.В. Рабочая тетрадь по русскому языку как иностранному (предложно-падежная система). Учебно-методическое пособие. - Архангельск, 2018. 152 с. 3. Маслова, О.Н. Русская грамматика [Электронный ресурс] : методич. рек. по русскому языку для иностр. обучающихся I–II курсов (базовый уровень) / О. Н. Маслова, О. В.Алексеева. - Архангельск: Изд-во Северного государственного медицинского университета, 2019 - 80 с. 4. Орлова Л.В. Рабочая тетрадь. Основы медицинской лексики (элементарный уровень)/ Л.В.Орлова – Архангельск: Изд-во Северного государственного медицинского университета, 2019. - 85 с. <p>Working with information and communication resources:</p> <p>Interactive game tasks</p> <ol style="list-style-type: none"> 1. Cases of nouns https://wordwall.net/play/9819/124/166 2. Verbs of motion http://www.rus-on-line.ru/Exercises/Grammar/28-grammar.html Perfective-Imperfective Java Exercises is a network 	Testing the reading technique. Vocabulary dictation. Checking written assignments in workbooks, oral questioning in the lesson. Control exercises in the lesson. Checking tasks in LMS Moodle. Testing.

		<p>linguistic trainer for verb types, for motion verbs. Website: http://www.alphadictionary.com/rusgrammar/java.html</p> <p>Syntax https://wordwall.net/play/9575/043/720</p> <p>https://wordwall.net/play/9575/043/720</p> <p>https://quizlet.com/561076265/match?i=3ba7pu&x=1Kqt</p> <p>Video lessons</p> <p>https://youtu.be/Pf6MSjnFTO4 -propositional</p> <p>https://youtu.be/qdknk8kJT3Q - genitive</p> <p>https://youtu.be/CKzDsa-vCgI - instrumental case</p> <p>https://youtu.be/EVIY-3frpAw - instrumental</p> <p>https://youtu.be/xPCSeC_jeQI - accusative case</p> <p>https://youtu.be/3u3t3C0bd4U - nominative</p> <p>https://youtu.be/d1_cYOz4QuI - dative case</p> <p>Control works and tests</p> <p>https://edu.nsmu.ru/mod/quiz/attempt.php?attempt=1064859&cmid=72942</p>	
3	Speech topics (dialogues, texts on everyday, educational, professional topics)	<p>Mastering vocabulary and grammar:</p> <p>Doing homework (writing exercises, reading texts on the studied lexical and grammatical material).</p> <p>Textbooks and tutorials:</p> <ol style="list-style-type: none"> 1.Овсиенко Ю.Г. Русский язык для начинающих (для говорящих на английском языке) [Текст]: [учебник]/ Ю. Г. Овсиенко Кн. 1: Русский язык, 2016. - 472 с.: ил. 2. Алексеева О.В. Рабочая тетрадь по русскому языку как иностранному (предложно-падежная система). Учебно-методическое пособие. - Архангельск, 2018. 152 с. 3. Орлова Л.В. Рабочая тетрадь. Основы медицинской лексики (элементарный уровень)/ Л.В.Орлова – Архангельск: Изд-во Северного государственного медицинского университета, 2016. - 85 с. <p>Doing homework: working with speech topics (dialogues, texts for everyday, educational, professional).</p> <p>Textbooks and tutorials:</p> <ol style="list-style-type: none"> 1. Ovsienko Yu.G. Russian for beginners (for those who speak English) [Text]: [textbook] / Yu. G. Ovsienko Kn. 1: Russian language, 2016. -- 472 p. : ill. 2. Alekseeva O.V. Workbook on Russian as a foreign language (prepositional-case system). Study guide. - Arkhangelsk, 2018.152 p. 3. Orlova L.V. Workbook. Fundamentals of medical vocabulary (elementary level) / L.V. Orlova - Arkhangelsk: Publishing house of the Northern State Medical University, 2016. - 85 p. <p>Working with information and communication resources:</p> <p>http://lrwi.ru/?p=1 - "Network text library". Network linguistic trainer (formation of reading skills)</p> <p>http://www.lrwi.ru/?p=1&t=29 - site of RCT enthusiasts</p>	<p>Role-playing games with various types of communication tasks.</p> <p>Conversation in the lesson.</p> <p>Individual survey.</p> <p>Online conference with native speakers (conversation on the topics studied: getting into real communication).</p>

	<p>(materials on topics) and other training videos (at the teacher's choice) on the channels RikiStudy, RussianLessons.Net (https://www.youtube.com/channel/UCq1b1x1nZbV-rmZDb3XOB2g), (themes my day, my family, etc.) Learn Russian with RussianPod101.com https://www.youtube.com/channel/UCUg_JDaHFAPEiFGDMddoIzA). THEMES LMS Moodle: https://edu.nsmu.ru/mod/quiz/attempt.php?attempt=1064859&cmid=72942</p>	
--	--	--

2nd year

1. Маслова, О.Н. Русская грамматика [Электронный ресурс]: методич. рек. по русскому языку для иностр. обучающихся I–II курсов (базовый уровень) / О. Н. Маслова, О. В. Алексеева. - Архангельск : Изд-во Северного государственного медицинского университета, 2019 - 80 с. - http://nb.nsmu.ru/cgi-bin/irbis64r_11/cgiirbis_64.exe?LNG=&Z21ID=&I21DBN=ELIB&P21DBN=ELIB&S21STN=1&S21REF=3&S21FMT=fullwebr&C21COM=S&S21CNR=20&S21P01=0&S21P02=1&S21P03=1&S21STR=elb/M%2031-788369
2. Маслова О.Н., Алексеева О.В. Справочник медицинских терминов для обучающихся 2 курса международного факультета врача общей практики Северного медицинского государственного университета. – Архангельск, 2020
3. 2 course Russian Language Russian Language as foreign // <https://edu.nsmu.ru/course/view.php?id=1391>
4. Russian Language lessons (Learn Russian for Free) // <http://www.russianlessons.net>
5. Русский глагол: <http://www.webmetod.narod.ru/ddd/Veb1.htm>

№	Name of the discipline section	Types of independent work	Control forms
1	Repeat the material you learned in your first year. Basics of professional communication	Working with the Reference Book of medical terms (Maslova O. N., Alekseeva O. V. Reference book of medical terms)	Identification of the level of understanding of the material in practical lesson
2	Genitive plural of nouns, adjectives, possessive pronouns, and demonstrative pronouns. Basics of professional communication	Make a table "Names of internal organs of a human" in Russian and English	Vocabulary dictation and oral response in practical lesson
3	Accusative plural of nouns, adjectives, possessive pronouns, and demonstrative pronouns. Basics of professional communication	Learn vocabulary on the topic " Man and his body. Objective indicators of the patient's physical condition " (Maslova O. N., Alekseeva O. V. Handbook of medical terms)	Listening to a prepared monologue

4	Prepositional plural of nouns, adjectives, possessive pronouns, and demonstrative pronouns	Prepare a presentation about one of the named NSMU classrooms (N. Amosov Auditorium, Lomonosov Auditorium, Bychikhin Auditorium, Kudryavtsev Auditorium)	Active participation in the practical lesson
5	Dative case of plural nouns, adjectives, possessive and demonstrative pronouns	Prepare a message on one of the topics "Why is smoking dangerous?", "What is the danger of alcohol consumption?", "What causes overeating?"	Active participation in the practical lesson
6	Instrumental case of plural nouns, adjectives, possessive and demonstrative pronouns	Prepare a message about your favorite place in Arkhangelsk. Presentation	Active participation in the practical lesson
7	Verbs of movement	Using verbs of movement, compose a text on the topic "A trip home during the summer holidays"	Listening to an audio response
8	Degrees of comparison of adjectives and adverbs	Preparation for the colloquial topic "Components of the concept of healthy lifestyle"	Active participation in the practical lesson
9	Generalization of the studied material	Preparation of lexical material based on specified models Name of the disease -ит Doctor's name-лог Department name-ия Name of medicines -ин	Verification of completed materials

3rd year

1) Маслова, О.Н., Полуэктова Т.Д. «Свидание с аутентичным текстом» / Учебно-методическое пособие

по русскому языку как иностранному для студентов 3-4 курсов (English medium) — Архангельск, 2020

2) Маслова О.Н., Алексеева О.В. Справочник медицинских терминов для обучающихся 2 курса международного факультета врача общей практики Северного медицинского государственного университета. – Архангельск, 2020

3) 3 course Russian Language Russian Language as foreign // <https://edu.nsmu.ru/course/view.php?id=1137¬ifyeditingon=1>

4) Russian Language lessons (Learn Russian for Free) // <http://www.russianlessons.net>

5) Русский глагол: <http://www.webmetod.narod.ru/ddd/Veb1.htm>

№ п/п	Наименование раздела дисциплины	Виды самостоятельной работы	Формы контроля
1.	Repetition of the material studied in the first year. The profession of a doctor. Patient's medical record	Working with tables in the electronic course Moodle and a reference book of medical terms (Маслова О.Н., Алексеева О.В. Справочник медицинских терминов)	Revealing the level of understanding of the material in a practical lesson

2.	First practice at a medical university Grammar: Verbs. Specific pairs of verbs. Verbs with a particle –ся. Movement verbs. Basics of professional communication	Describe your daily routine with verbs, paying special attention to the diagram of your path from the hostel to different buildings of the university	Oral answer in a practical lesson
3.	Verb forms. The verbal participle. Participle. Basics of professional communication	Memorize the exam topic "Practice in the hospital"	Listening to a prepared monologue
4.	Musculoskeletal system. Bones and Muscles. Grammar: Active, passive constructs. Basics of professional communication	Learn the medical terms on the topic	Vocabulary dictation and oral answer in a practical lesson
5.	Musculoskeletal system. The structure of the human skeleton Grammar: Expressing tense in simple and complex sentences Basics of professional communication	Learn the medical terms	Checking crosswords, classmates filling out each other's crosswords.
6.	Musculoskeletal system. Human skeleton. Posture. Grammar: Expressing cause and effect in a simple and complex sentence. Basics of professional communication	Using conjunctions that express cause and effect in the proposal, make a dialogue on the topic "Doctor-patient"	Activity of participation in the practical lesson
7.	Control slice of knowledge for the 5th semester	Prepare for the test on grammatical and lexical material of the 5th semester	Intermediate testing
8.	Musculoskeletal system. Diseases and injuries. Grammar: Expressing purpose and condition in a simple and complex sentence. Basics of professional communication	Preparation of lexical material according to the given models 1. Name of the disease / injury 2. Phrases of the patient 3. Phrases of the doctor 4. Name of drugs	Checking the issued materials
9.	Doctors of Russia. Grammar: Expressing	Draw up the table "Musculoskeletal system" in	Vocabulary dictation and oral answer in a practical

	concession in a simple and complex sentence. Basics of professional communication	Russian and English	lesson
10.	Dative impersonal constructions Basics of professional communication	Memorize the examination topic "Doctors of Russia"	Listening to a prepared monologue
11.	Repetition of the material learned. Exam topics "Doctors of India", "Healthy lifestyle", "Physical inactivity" Basics of professional communication	Prepare a report on the topic "My idol. Great Indian doctor" Memorize the exam topics "Doctors of India", "Healthy lifestyle", "Physical inactivity"	Presentation to the class. Listening to prepared monologues
12.	Module control	Prepare for the final test for the 3rd year	Acceptance of debts on exam topics. Final control work (lexical and grammatical tasks, drawing up questions to the proposed text)

4th year

№	Name of the section	Types of unsupervised work	Forms of control
1	SECTION 1.1. Conversation topic "Diseases of the XX and XXI centuries." Fundamental systems of human organs. Human skin.	Input control. Revising of the vocabulary and grammar for the third year of study.	Lexico-grammatical test in the Moodle system
2	SECTION 1.1. Conversation topic "Diseases of the XX and XXI centuries." Fundamental systems of human organs. Human skin.	Working with video materials "Healthy means wealthy! Summer epidemic: scabies" (05/25/2018, 26-34 min).	Checking the exercises in the Moodle system
3	SECTION 1.3.	Reading: professionally oriented	Checking pre-text

	<p>Conversation topic "Diseases of the XX and XXI centuries."</p> <p>Fundamental systems of human organs. Human skin.</p>	<p>texts "What is plague?"</p> <ol style="list-style-type: none"> 1. Working with pre-text exercises. Working with vocabulary. 2. Reading and translating the text. 3. Working with post-text exercises. 	<p>and post-text exercises in the Moodle system</p>
4	<p>SECTION 1.3.</p> <p>Conversation topic "Diseases of the XX and XXI centuries."</p> <p>Fundamental systems of human organs. Human skin.</p>	<p>Drawing up the topic "Diseases of the XX and XXI centuries" and preparing for oral check-out test based on it.</p>	<p>Individual test on the topic "Diseases of the XX and XXI centuries".</p>
5	<p>SECTION 1.3.</p> <p>Conversation topic "Diseases of the XX and XXI centuries."</p> <p>Fundamental systems of human organs. Human skin.</p>	<p>Revising the section 1. Lexico-grammatical test.</p>	<p>Lexico-grammatical test in the Moodle system</p>
6	<p>SECTION 2.1.</p> <p>Conversation topic "Fundamental principles of medical ethics".</p> <p>Fundamental systems of human organs. Excretory system</p>	<p>Fundamental systems of human organs. Excretory system. Working with video materials: Healthy means wealthy! What you need to know about the kidneys? (05/30/2017)</p>	<p>Checking the exercises in the Moodle system</p>
7	<p>SECTION 2.2.</p> <p>Conversation topic "Fundamental principles of medical ethics".</p> <p>Fundamental systems of human organs. Excretory system</p>	<p>Reading: professionally oriented texts "What is useful and what is bad for the kidneys" / "Why do people have different skin colors?"</p> <ol style="list-style-type: none"> 1. Working with pre-text exercises. Working with vocabulary. 2. Reading and translating the text. 3. Working with post-text exercises. 	<p>Checking pre-text and post-text exercises in the Moodle system</p>

8	SECTION 2.3. Conversation topic "Fundamental principles of medical ethics". Fundamental systems of human organs. Excretory system	Drawing up the topic "Fundamental principles of medical ethics" and preparing for oral check-out test based on it.	Individual test on the topic "Diseases of the XX and XXI centuries".
9	SECTION 2.3. Conversation topic "Fundamental principles of medical ethics". Fundamental systems of human organs. Excretory system	Revising the section 2. Lexico-grammatical test.	Lexico-grammatical test in the Moodle system

7. Forms of control

1st year

7.1. Current forms of control

- oral (express-survey in a practical lesson, checking knowledge of thematic vocabulary, telling the text according to the plan, reciting the text by heart, restoring the text using key words, making sentences according to given schemes, drawing up a dialogue).
- written (checking written homework assignments, tests, vocabulary dictations).

7.2. Forms of the interim assessment (pass/fail test, examination, term paper)

Stages of the interim assessment

Stages of examination (pass/fail test)

Stage 1 - a series of tests on the completion of lexical and grammatical topics (performance of oral and written assignments on the LMS Moodle).

Stage 2 - the final test (test) in vocabulary and grammar (on the LMS Moodle).

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

Questions for a pass/fail test and an examination, a theme list of test collections and situational problems are shown at the Appendix No 4 of the syllabus of the course (module) 'Set of the evaluation tools for the current control and interim assessment of students'.

2nd and 3rd year

7.1. Forms of current control

- oral (interview, speech, presentations)
- written (tests, test papers).

7.2. Forms of intermediate certification-none

4th year

7.1. Current forms of control

- oral (an express checking-out test in a practical lesson, checking the knowledge of thematic vocabulary, retelling the text according to the plan, reciting the text by heart, restoring the text using key words, making sentences using the schemes given, drawing up a dialogue, making an interview, report, presentation)
- written (test, training exercises, module test, word quiz, essay, lecture notes).

A theme list of abstracts, reports, essays, review and term papers, test collections and situational problems are shown at the Appendix No 4 of the syllabus 'Set of the evaluation tools'.

7.2. Interim assessment

Stage 1 - lexical and grammatical test.

Stage 2 - conversation topic.

Stage 3 - reading and translating the text. Discussing the text.

8. Library and information materials of the course

1st year

8.1. Compulsory literature

1. Дорога в Россию [Текст] : учеб. рус. яз. : (элементар. уровень)/ В. Е. Антонова [и др.] [Кн.] 1. - 10-е изд.: Златоуст: ЦМО МГУ, 2013. - 341, [1] с.: илл.
2. Овсиенко Ю.Г. Русский язык для начинающих (для говорящих на английском языке) [Текст] : [учебник]/ Ю. Г. Овсиенко Кн. 1: Русский язык, 2016. - 472 с.: ил.
3. Алексеева О.В. Рабочая тетрадь по русскому языку как иностранному (предложно-падежная система). Учебно-методическое пособие. - Архангельск, 2018. 152 с.
4. Маслова, О.Н. Русская грамматика [Электронный ресурс] : методич. рек. по русскому языку для иностр. обучающихся I-II курсов (базовый уровень) / О. Н. Маслова, О. В. Алексеева. - Архангельск: Изд-во Северного государственного медицинского университета, 2019 - 80 с. - http://nb.nsmu.ru/cgi-bin/irbis64r_11/cgiirbis_64.exe?LNG=&Z1ID=&I21DBN=ELIB&P21DBN=ELIB&S21STN=1&S21REF=3&S21FMT=fullweb&C21COM=S&S21CNR=20&S21P01=0&S21P02=1&S21P03=I=&S21STR=elb/M%2031-788369
5. Орлова Л.В. Рабочая тетрадь. Основы медицинской лексики (элементарный уровень)/ Л.В.Орлова – Архангельск: Изд-во Северного государственного медицинского университета, 2019. - 85 с.

8.2. Supplementary literature

1. Русский язык как иностранный: элементарный уровень: учебное пособие / Р.Р. Сабитова и др. – Казань, 2018. – 168 с.

2. Русский язык как иностранный: элементарный уровень: учебное пособие / Н.Ф. Башарова и др. – Казань, 2017.
3. Методические рекомендации по русскому языку как иностранному для студентов I - II курсов [Текст] / О. Н. Маслова; Север. гос. мед. ун-т. Каф. рус. яз. как иностр. - Архангельск: [б. и.], 2014. - 37 с.
4. Миллер Л.В. Жили-были... 12 уроков русского языка. Базовый уровень [Текст]: учебник/ Л. В. Миллер, Л. В. Политова. -6-е изд.. -Санкт-Петербург: Златоуст, 2013. - 197 с.
5. Маслова О.Н. Методические рекомендации по русскому языку как иностранному (2-й сертификационный уровень. Профессиональный модуль) [Электронный ресурс] :методический материал / О. Н. Маслова. - Архангельск : Северный государственный медицинский университет, 2012 - 60 с. – URL: http://nb.nsmu.ru/cgi-bin/irbis64r_11/cgiirbis_64.exe?LNG=&Z21ID=&I21DBN=ELIB&P21DBN=ELIB&S21STN=1&S21REF=3&S21FMT=fullweb&C21COM=S&S21CNR=20&S21P01=0&S21P02=1&S21P03=I=&S21STR=elb/M%2031-343370

2nd year

8.1. Compulsory literature

- Овсиенко Ю.Г. Русский язык для начинающих. – М., 2016.
- Маслова, О.Н. Русская грамматика [Электронный ресурс]: методич. рек. по русскому языку для иностр. обучающихся I–II курсов (базовый уровень) / О. Н. Маслова, О. В. Алексеева. - Архангельск: Изд-во Северного государственного медицинского университета, 2019. - 80 с.
- Русский язык как иностранный: базовый уровень: учебное пособие. / Н.Ф. Башарова и др. – Казань, 2017.
- Сиротина Т.Б., Русский язык как иностранный. Научный стиль речи: практикум для студентов-иностранцев подготовительных факультетов вузов / Т.Б. Сиротина - М. : ФЛИНТА, 2013. - 64 с. <https://www.studentlibrary.ru/cgi-bin/mb4x>

8.2. Supplementary literature

1. Маслова О.Н., Алексеева О.В. Справочник медицинских терминов для обучающихся 2 курса международного факультета врача общей практики Северного медицинского государственного университета. – Архангельск, 2020
 2. Шустикова Т.В., Русский язык как иностранный. Русские глаголы. Формы и контекстное употребление / Шустикова Т.В. - М. : ФЛИНТА, 2017. - 394 с.
- <https://www.studentlibrary.ru/book/ISBN9785893494341.html?SSr=2701343e3b1009cc31b05330.maslova16>

3rd year

8.1. Compulsory literature

- 1) Ю.Г. Овсиенко Русский язык: Учебник. Книга 2. Средний этап обучения. – 2-е изд. – М.: «Рус. яз.». Курсы, 2013. – 248 с.
- 2) Маслова О.Н., Верюжская А.Б. Практические учебные материалы по русскому языку как иностранному для студентов 3 курса (English Medium). – Архангельск, СГМУ, 2014.
- 3) Маслова, О.Н., Полуэктова Т.Д. «Свидание с аутентичным текстом» / Учебно-методическое пособие по русскому языку как иностранному для студентов 3-4 курсов (English medium) — Архангельск, 2020

4) Русский язык как иностранный: базовый уровень: учебное пособие. / Н.Ф. Башарова и др. – Казань, 2017.

5) Сиротина Т.Б., Русский язык как иностранный. Научный стиль речи: практикум для студентов-иностранцев подготовительных факультетов вузов / Т.Б. Сиротина - М. : ФЛИНТА, 2013. - 64 с. <https://www.studentlibrary.ru/cgi-bin/mb4x>

8.2. Supplementary literature

1) Маслова О.Н., Алексеева О.В. Справочник медицинских терминов для обучающихся 2 курса международного факультета врача общей практики Северного медицинского государственного университета. – Архангельск, 2020

2) Шустикова Т.В., Русский язык как иностранный. Русские глаголы. Формы и контекстное употребление / Шустикова Т.В. - М. : ФЛИНТА, 2017. - 394 с. <https://www.studentlibrary.ru/book/ISBN9785893494341.html?SSr=2701343e3b1009cc31b0533o.maslova16>

3) Антонова В.Е. Дорога в Россию: учебник русского языка (базовый уровень). – 6-е издание. – М.: ЦМО МГУ; С-Пб: Златоуст, 2012. – 256 с.

4) Антонова В. Е.. Дорога в Россию [Текст] : учеб. рус. яз. : (базовый уровень)/ В. Е. Антонова, М. М. Нахабина, А. А. Толстых [Кн.] 2. - 7-е изд.: Златоуст: ЦМО МГУ, 2013. - 256 с.: ил.3. .

4th year

8.1. Compulsory literature

1. Куриленко В.Б., Русский язык для будущих врачей. MedicalRussian (I сертификационный уровень владения РКИ в учебной и социально-профессиональной макросферах) / Куриленко В.Б. - М. : ФЛИНТА, 2017. - 133 с. (Русский язык как иностранный) - Текст : электронный // ЭБС "Консультант студента": [сайт]. URL : <https://www.studentlibrary.ru/book/ISBN9785976528161.html>

2. Русский язык как иностранный: лексика (продвинутый уровень) : учебно-методическое пособие / Л. К. Гатауллина, Р. Р. Сабитова; Минобрнауки России, Казан. нац. исслед. технол. ун-т. - Казань : Изд-во КНИТУ, 2018. - 96 с. - URL : <https://www.studentlibrary.ru/book/ISBN9785788223940.html>

8.2. Supplementary literature

1. Вишняков С.А., Русский язык как иностранный / С.А. Вишняков - М. : ФЛИНТА, 2016. - 240 с. - Текст : электронный // ЭБС "Консультант студента" : [сайт]. – URL : <https://www.studentlibrary.ru/book/ISBN9785893496390.html>

2. Одинцова И.В., Русский язык как иностранный. Он и она / Одинцова И.В. - М. : ФЛИНТА, 2017. - 160 с. - Текст : электронный // ЭБС "Консультант студента" : [сайт]. – URL : <https://www.studentlibrary.ru/book/ISBN9785893492705.html>

3. Антонова В. Е.. Дорога в Россию [Текст] : учеб. рус. яз. : (базовый уровень)/ В. Е. Антонова, М. М. Нахабина, А. А. Толстых[Кн.] 2. - 7-е изд.: Златоуст: ЦМО МГУ, 2013. - 256 с.: ил.3.

4. Антонова В. Е., Нахабина М. М., Толстых А. А. Дорога в Россию: учебник русского языка (первый уровень - I): в 2 т. – Т.П. - 3-е изд. – СПб.: Златоуст, 2014.

5. Акишина М.А. Обучение синтаксису русского языка (Практическая часть) [Текст] : метод. рек. для иностр. студентов 2 курса EnglishMedium/ М.А. Акишина, А.Б. Верюжская; Сев. гос. мед. ун-т. Каф. рус. языка как иностр. - Архангельск : СГМУ, 2011. - 19, [1] с.

6. Верюжская А.Б. Способы выражения субъекта и предиката [Текст]/ А. Б. Верюжская. -Архангельск: Изд-во СГМУ, 2011. - 24 с., Б.ц
7. Маслова О.Н. Методические рекомендации по русскому языку как иностранному (2-й сертификационный уровень. Профессиональный модуль) [Электронный ресурс]: методический материал / О. Н. Маслова. - Архангельск : Северный государственный медицинский университет, 2012 - 60 с. –
URL:http://nb.nsmu.ru/cgi-bin/irbis64r_11/cgiirbis_64.exeLNG=&Z21ID=&I21DBN=ELIB&P21DBN=ELIB&S21STN=1&S21REF=3&S21FMT=fullweb&C21COM=S&S21CNR=20&S21P01=0&S21P02=1&S21P03=I=&S21STR=elb/M%2031-343370

8.3. List of the information and telecommunications Internet resources required for mastering of the course (module)*

1st year

№	Resources	URL address	Resource Annotation
Resources for learning curriculum (language theory) and practice exercises			
1	Electronic library of NSMU	http://www.nsmu.ru/lib/	The resource contains electronic versions of textbooks on Russian as a foreign language from the main list of literature.
2	Time to speak Russian	https://www.irlc.msu.ru/irlc_projects/speak-russian/time_new/	The site contains a variety of materials (lessons, grammar reference book, tests, dictionaries, etc.). Convenient interface, good structure of the course.
3	Lean Russian step by step	https://learnrussiastepbystep.com	The site provides lessons on all grammatical topics necessary for an elementary level, speech models and vocabulary tests are given in a separate section.
4	Everyday Russian	https://everydayrussianlanguage.com	The site contains educational materials (lessons with explanations of grammar, tasks for mastering vocabulary and grammar).
5	Russian for everyone	http://www.russianforeveryone.com	The site contains educational materials, including an introductory phonetic course, as well as thematic lessons.
6	Quizlet	https://quizlet.com	A resource containing a variety of flashcards for learning educational material as well as games.
Resources for training exercises and monitoring			

	Learningapps	https://learningapps.org	A site containing exercise templates (for grading, multiple choice tests, etc.). Convenient for organizing students' independent work (memorizing language units). One of the ways to activate the mechanisms of memorizing new material with the help of motor and visual mechanisms.
	Wordwall	https://wordwall.net	A site containing templates for various tasks, including quizzes, word games, crosswords, which can be used both interactively and in print.
	Quizlet	https://quizlet.com	A resource containing a variety of flashcards for learning educational material as well as games.

2nd year

№	Resource name	URL address	Abstract of the resource
1	Russian for everybody (Русский язык для всех)	http://www.russianforeveryone.com ://www.russianforeveryone.com/	Prepositional -singular system, verb conjugation
2	Materials on Russian as a foreign language by Prof. T.Beyer (Middlebury College)	http://community.middlebury.edu/~beyer/mapryal/	Interactive materials on Russian as a foreign language. Prepositional-case system of the Russian language in the singular. Word formation. Syntax.
3	2 course Russian Language Russian Language as foreign	https://edu.nsmu.ru/course/view.php?id=1391	System of classes in the program of the module of the discipline "Russian language" 2nd year

3rd year

№	Resource name	URL address	Abstract of the resource
1	Russian for everybody	http://www.russ	Prepositional-case system in the

	(Русский язык для всех)	ianforeveryone.com/	singular, conjugation of verbs
2	Материалы по русскому языку как иностранному проф. Т.Байера (Middlebury College)	http://community.middlebury.edu/~beyer/mapryal/	Interactive materials on Russian as a foreign language. Prepositional-case system of the Russian language in the singular. Word formation. Syntax. Conjunctions.
3	3 course Russian Language Russian Language as foreign	https://edu.nsmu.ru/course/view.php?id=1137	The system of classes according to the program of the module of the discipline "Russian language" 3 course
4	Портал по русскому языку как иностранному "RussNet" (на английском языке).	http://www.russnet.org	Portal on Russian as a foreign language, making it easier to master the material of the lessons
5	Russian Studies Department, Bucknell University (на английском языке)	http://www.departments.bucknell.edu/russian	resources for learners of Russian language and culture of Russia
6	Медицинский портал medportal.ru.	http://medportal.ru/mednovosti/	
7	MedDaily – «МедДэйли»	http://www.meddaily.ru/	A site giving information about news in medicine.
8	Новости из России – дистанционный курс русского языка как иностранного для продвинутого уровня (Центр международного образования МГУ).	http://www.iec.ru	Distance course for students who show special success in learning Russian and who want to work with additional material
9	Russian Web Tutor	http://www.auburn.edu/~mitrege/RWT	Interactive materials on Russian as a foreign language

4th year

1. Study course of Russian as a foreign language (Pushkin institute) <http://ac.pushkininstitute.ru/index.php>
2. Webportal "Образование на русском" <https://pushkininstitute.ru/>
3. Webportal "Образование на русском" B1 level. <https://pushkininstitute.ru/certified1>
4. Russian for free (website): texts, lexic, videos, dialogues etc.): <http://www.russianforfree.com/>
5. Educational portal, which presents various types of online learning resources in Russian as a foreign language for beginner, intermediate and advanced levels. <http://masterrussian.com/>

6. О.Э. Чубарова. Сетевая текстовая база Центра международного образования МГУ имени М.В. Ломоносова. Все уровни ТРКИ.
https://www.irlc.msu.ru/irlc_projects/texts/
7. RussianWebTutor (Russian as a foreign language: interactive materials).
<http://www.auburn.edu/~mitrege/RWT>
8. Materials for studying Russian as a foreign language by T. Bayer (Middlebury College). <http://community.middlebury.edu/~beyer/mapryal/>
9. The official site of the TV program "Жить здорово".
<https://www.zdorovieinfo.ru/zhitzdorovo/home/>
10. The official site of the TV program "О самом главном".
<http://osglavnom.ru/novosti/o-samom-glavnom-vypusk-2581-ot-24-sentyabrya-2020.html>
11. A. L. Myasnikov's official website "Доктор Мясников". <https://drmyasnikov.ru/>

8.4. Implementation of e-learning (EL), the use of distance learning technologies (DLT)

1st year

№	Platform of EL DLT	Name of the e-course, authors, URL address	E-course implementation model
1	MOODLE (with the use of video lessons in ZOOM with the use of electronic boards MIRO)	1 course Foreign language Russian Language as foreign (Ph.D., associate professor of NSMU O.V. Alekseeva) https://edu.nsmu.ru/course/view.php?id=1394	depending on the conditions of study: (1) blended learning + EC (2) blended learning + EC

2nd year

№	The EE and DLT platform	Name of the e-course, authors, URL	Implementation model of the electronic course
	Moodle Zoom	2 course Russian Language Russian language as foreign https://edu.nsmu.ru/course/view.php://edu.nsmu.ru/course/view.php?id=1391	<i>mixed training</i> +EC,

3rd year

№	The EE and DLT platform	Name of the e-course, authors, URL	Implementation model of the electronic course
1	Moodle	3 course Russian Language Russian language as foreign, Полуэктова Татьяна Дмитриевна,	<i>mixed training</i> +EC,

	Zoom	https://edu.nsmu.ru/course/view.php?id=1137	
--	------	---	--

8.5. The list of the software and information & reference systems

The following software is used in the educational process by students and professors:
operating system-MS Windows Vista Starter, MS Windows Prof 7 Upgr; **office suite**-MS Office 2007; other **software** - 7-zip, AdobeReader, Kaspersky Endpoint Security

9. Material and technical facilities necessary for the educational process*

№	Name of the study room	Location of the study room	List of the main equipment of the study room
	classrooms for seminar-type classes № 1513 1514 1515 1515 a 1516 1516 a 1521 1521 a	NSMU Troitsky Ave., 51, building 1, 5th floor	each auditorium has 15-20 seats, double tables, a board, stands. Bookcases and / or shelves: No. 1513, 1514, 1515a, 1516, 1516a, 1521 Special equipment: No. 1513 - TV, laptop No. 1516 - TV, laptop No. 1516a - screen, projector