Faculty of Humanities and social Sciences

ANNOTATION OF ACADEMIC DISCIPLINE

The name of the discipline	Philosophy	
The amount of discipline	3 CU (108 hours.)	
Course Description		
Topics	Content of topics	
WHAT IS PHILOSOPHY	UNIT 1. The subject of philosophy, its functions, method and main divisions. The problem of practical value of philosophy: two approaches. Philosophy as a type of worldview. Philosophy and science. Philosophy and its subject. Functions of philosophy. Divisions of philosophy. UNIT 2. The genesis of philosophy. How a person comes to philosophy: two approaches. "Axis time" and the genesis of philosophy. The beginning of philosophy in ancient India. The beginning of philosophy in ancient China. UNIT 3. The beginning of philosophy in ancient Greece (from Phales to Socrates). Main studies of the first Greek philosophy. Sophists: the problem of true knowledge. Socrates: life and teaching. Socrates' ethical	
	philosophy.	
PHILOSOPHICAL	UNIT 4. Axiology: philosophical study of values. Axiology: what is value? Non-material, material and post-material	
STUDY OF SOCIETY	values in Habermas' philosophy. The subjective and objective elements in the process of evaluating. The system and hierarchy of values: the organizing principles. The problem of "anomia". Morality and ethics. The purposes of morality. The four domains of ethical assessment and their evaluation terms. Utilitarian ethics: pleasure principle and teleological principle. Kantian deontological ethics: hypothetical and categorical imperatives. Religious values and the problem of reevaluation of values. UNIT 5. Philosophy of history. The problem of progress. Progress and regress. The criteria of social progress. Cyclic, linear and spiral models (patterns) of history. Historicism and "rhizomatic" model of history. UNIT 6. Theory of civilizations. The concepts of civilization. Linear civilization concept. The concept of local civilizations. Traditional (pre-industrial) civilization. Industrial civilization. Mass-culture: pros and cons. Post-industrial civilization. UNIT 7. Justice, legitimation and justification of a state authority. Justice: metaphysical and social levels. Theory of distributive justice: strict egalitarianism, resources-based principle, utilitarian principle, desert-based principle, libertarianism, differential principle. State authority: legality and legitimacy. Historical forms of legitimation of	

PHILOSOPHICAL	UNIT 8. Philosophical worldview of Ancient Greece and Middle Ages.
WORLDVIEW AND	Worldview and metaphysics. Philosophical Worldview of Ancient
METAPHYSICAL	Greece: general principles. Metaphysical theories by Plato, Aristotle
THEORIES	and Plotinus. Philosophical Worldview of Middle Ages: general
	principles.
	UNIT 9. Philosophical worldview of the Renaissance,
	Modern Time and specifics of contemporary worldview.
	Philosophical worldview of the Renaissance and Modern Time:
	general principles. Metaphysics and the foundation of contemporary
	science. Specific principles of contemporary worldview.
PHILOSOPHICAL	UNIT 10. Theories of truth and true cognition.
STUDY OF	Empirical, rational and super-rational cognition. Consciousness,
KNOWLEDGE	knowledge and cognition. The principle of reflection. Correspondent,
AND	coherent and pragmatic theories of truth. Criterions of truth. Forms of
COGNITION	empirical cognition: sensations, perceptions, recollections. Forms of
	rational cognition: concepts, judgments. Inferences: inductive,
	deductive and analogical.
	UNIT 11. Philosophy and the limits of cognition.
	Paradigms and types of scientific rationality. F.Bacon' theory of
	idols. Skepticism in ancient Greece. Local, global and superglobal
	skepticism. Kantian theory of Knowledge. The problem of "thing in
	itself". E. Husserl's theory of phenomenological reduction.
PHILOSOPHYCAL	UNIT 12. The study of human nature.
ANTHROPOLOGY	Natural and cultural components of human being. Mundane and
	divine components of human being. The problem of good and evil in
	human nature and its political implementations. Conscious and
	unconscious components in human being.
	UNIT 13. The problem of freedom: philosophical approach.
	Determinism and indeterminism in philosophy. Freedom and
	responsibility. Escape from freedom and its main mechanisms) by
	Erich Fromm.
	UNIT 14. The purpose of life: philosophical approach.
	The problem of the meaning of life. The main vectors of the search
	for the purpose of life: individualism and collectivism, pragmatism
	and idealism, mundanism and transcendentalism.
FUTURE OF	UNIT 15. Postmodern philosophy. The problem of authenticity.
PHILOSOPHY	Pre-modern, modern and post-modern cultural types. Postmodernism
	in art, science and philosophy. Simulation and the problem of
	authenticity.
	UNIT 16. Course outcomes.
	General conclusions.

ass. professor, social philosophy department

Philipp V. Tagirov

Head of the Department of social philosophy

Marina L. Ivleva

Faculty of Humanities and social Sciences

ANNOTATION OF ACADEMIC DISCIPLINE

The name of the discipline	Bioethics
The amount of discipline	3 CU (108 Hours.)
	Course Description
Topics	Content of topics
Ethics is a philosophical science	Concept of morality and structure of moral thinking. Ethics is philosophy science. Ethics' types. Main categorical concepts of Morality. Applied ethics: its concept and structure.
Bioethics: its status, range of problems	Concept of bioethics, its place in philosophy and science. Main models of medical ethics throughout the History. Main principles of bioethics.
Modern biomedical ethics.	Main models of medical ethics throughout the History. Main principles of bioethics. Historical development of biomedical ethics. Medical ethics. General Issues. Hippocratic Oath and modern biomedical ethics. Rights and moral responsibility of medical personnel. Patients' rights. Ethics and epidemiology.
Abortion. Ethical aspects of reproductive technologies.	Moral problems of reproductive technologies. Genetic engineering. Medical ethics. General Issues. Hippocratic Oath and modern biomedical ethics. Rights and moral responsibility of medical personnel. Patients' rights.
Ethical issues of biotechnology (cell studies, gene therapy, gene engineering, cloning).	Rights and moral responsibility of medical personnel. Patients' rights. TU -14. Defining death. Dying, dementia, aging. Main principles of bioethics.
Death and Dying. End of Human Life.	Defining death. Dying, dementia, aging. Main principles of bioethics. Medical ethics. General Issues. Hippocratic Oath and modern biomedical ethics. Rights and moral responsibility of medical personnel. Patients' rights.
Organ transplantation	Main models of medical ethics throughout the History. Main principles of bioethics. Rights and moral responsibility of medical personnel. Patients' rights. Defining death. Dying, dementia, aging. Defining death. Dying, dementia, aging. Organ transplantation.

Moral problems of physical and	Main models of medical ethics throughout the History.
mental integrity of patient	Medical ethics. General Issues. Hippocratic Oath and
	modern biomedical ethics. Rights and moral
	responsibility of medical personnel. Patients' rights.
	Defining death. Dying, dementia, aging. Defining death.
	Dying, dementia, aging. Mental medicine and
	antipsychiatry.
Experiments involving Human	Research ethics. Animals' rights. Main principles of
being and animals: legislative and	bioethics. Historical development of biomedical ethics.
moral background	International documents protecting humans and animal
	involved in the research.

Developers: Professor of the Department of ethics

O.V. Savvina

Head of the Department of ethics

V. A. Tsvyk

Faculty of Humanities and social Sciences

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	History	
Amount of discipline	3 CU(108 hours)	
	Course Description	
Topics	Content of topics	
The science of history	The subject and objectives of the course. The science of history. Social, political and socio-natural history. Periodization of the world-historical process. Civilizational, culturological and formational approaches to the history of humanity.	
Ancient Russia	The problem of ethnogenesis of the Eastern Slavs; the main stages of formation of the old Russian state and its socio-political system; the most important events of domestic and foreign policy of Kievan Rus, their causes, nature and consequences; the main monuments of ancient culture IX – early XII century.	
Feudal fragmentation and struggle for independence	Prerequisites of political fragmentation, its essence and consequences; the evolution of the East Slavic statehood to the beginning of the XII century.; features of the largest centers of Russia of this period: Vladimir-Suzdal and Galicia-Volyn principalities, Novgorod Republic; the main events related to the struggle of Russia against foreign invaders in the XIII century.; the consequences of the Mongol invasion and the influence of Mongol rule on the development of Russian lands	
Formation of the Russian Prerequisites and features of the formation of a single Russian st		
united state	important events associated with the rise of the Moscow Principality in North-Eastern Russia (XIV – mid XV century.); the main events of the final stage formation of a united Russian state, its socio-political, economic and spiritual development; features of domestic and foreign policy of Ivan III.	
Russia in the XVI century. The main events of the final stage formation of a united Russian sta		
Ivan the Terrible	political, economic and spiritual development; features of domestic and foreign policy of Ivan III and Vasily III; features of the reign of Ivan IV; reforms of the Elected Rada; the causes and consequences of oprichnina; the main directions	
	of foreign policy of the Moscow state in the XVI century., the characteristic features of Russian traditional culture and its achievements in this period	
Time of Troubles and the beginning of Romanov's reign	The causes, chronology and main events of the Time of Troubles, their consequences; the political development of the country during the first Romanovs, the beginning of the absolute monarchy; tasks and results of Russia's foreign policy in the XVII century.; features of socio-economic and spiritual development of Russia in the XVII century.; new features in the economy of the country; the social structure of Russian society; stages of registration of serfdom; manifestations of social protest in this period, their causes and consequences; the split of the Russian Orthodox Church	
Peter I and his age	The need for Peter's reforms and the beginning of modernization of the country;	
	the main directions of domestic policy of Peter I and its consequences; foreign policy in the era of Peter I; achievements of Russian culture in this period.	
The age of Palace coups	Features of the era of Palace coups, its causes, nature and consequences.	
The Russian Empire in the second half of the XVIII century	The essence and the most important features of the policy of "enlightened absolutism"; the main reforms of Catherine II; the main trends of socio-economic development of the country, the contradictions of class policy; objectives and results of Russian foreign policy of the second half of the XVIII century.; achievements of Russian culture of this period	

Russia in the first quarter of	Socio-economic development of Russia by the beginning of the XIX century,	
the XIX century. Paul I.	features of domestic and foreign policy of Paul I, features of domestic and	
Alexander I. Patriotic war of	foreign policy of Alexander I and the main results of his reign	
1812	loreign poncy of Alexander 1 and the main results of his reign	
	December 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
Decembrists movement. Reign	Prerequisites, goals, organizations, policy participants of the Decembrist	
of Nicholas I	movement; the most important events of domestic and foreign policy of	
	Nicholas I; protective, liberal and radical directions of social movement in the	
	second quarter of the XIX century; the main achievements of Russian culture in	
	the first half of the XIX century.	
Alexander II and the era of	Prerequisites, essence and importance of reforms of Alexander II; features of	
reforms	socio-economic development of post-reform Russia; social movement of the	
	1850s – early 1880s.: ideology, organizations, participants; main directions,	
	goals and results of foreign policy of Alexander II	
Russian Empire during the	Features of domestic and foreign policy of Alexander III; social movement;	
reign of Alexander III	world importance of Russian culture in the second half of the XIX century.	
Features of the development of	Tasks of modernization in Russia; development of capitalism in Russia; reforms	
capitalism in Russia (the last	of S. Witte	
quarter of the XIX century.)		
Russian Empire in the	The essence of the internal policy of Nicholas II; reform projects of the early	
beginning of XX cent. Nicholas	XX cent.; social movement; the main political parties, their classification,	
II.	leaders and program settings; especially the formation of Russian	
11.	parliamentarism; the results and significance of the revolution; the main events	
	of Russian foreign policy at the turn of XIX–XX centuries.; the causes of the	
	First world war and the goals of the parties; attitude to the war in society; the	
	results and consequences of the war.	
Revolutions in Russia	The causes, character, main events and participants of the first Russian	
	revolution (1905-1907); the causes of the February revolution; the overthrow of	
	the autocracy; the activities of the Provisional government and the Soviets; the	
	leaders and policies of the main political parties in 1917; the causes of the	
	coming to power of the Bolsheviks; the essence of the first decrees of Soviet	
	power; the transformation of the Bolsheviks in the sphere of public	
	administration, economy and foreign policy, addressing national and social	
	issues; the convening and dissolution of the Constituent Assembly	
Domestic policy of Soviet	Results and consequences of the Civil war and intervention (1918-1920); the	
Russia and the USSR in the	main activities of the policy of "war communism"; the reasons for the victory of	
prewar period	the Bolsheviks; peculiarities of the national policy of the Soviet power, the	
	formation of the USSR, the folding of the one-party political system; the nature	
	and results of the NEP, the policy of industrialization, collectivization and	
	cultural revolution; the main features and consequences of a regime of personal	
	power of Stalin.	
The USSR during the great	Changes in the international situation, the main directions, events of foreign	
Patriotic war (1941-1945)	policy of the USSR in the 1920s-1930s, their results and consequences; the most	
	important international treaties concluded on the eve and in the initial period of	
	the Second world war; expansion of the USSR in the prewar period; the most	
	important events of the great Patriotic war; restructuring of the rear in a military	
	way; the creation of the anti-Hitler coalition and international conferences of the	
	allied powers during the war, the results and significance of the victory of the	
	USSR.	
Postwar years. The beginning	The main trends of social and political life of the USSR, the tightening of the	
of Khrushchev's rule.	political regime and ideological control; features and results of socio-economic	
of ixin ushchev 8 fulc.	policy; changes in the international arena, the beginning of the "cold war", the	
	important events of the foreign policy of the USSR in the postwar period	
	important events of the foreign poncy of the OSSK in the postwar period	

Thaw as a special stage of	Changes in the top party leadership after Stalin's death, measures for de-
development of the USSR.	Stalinization, democratization of the political system, contradictions of the
	domestic policy, the most important measures of socio-economic policy of G.M.
	Malenkov and N.S. Khrushchev, "thaw" in the spiritual sphere; new trends in
	international relations and changes in Soviet foreign policy, its main directions;
	the adoption of the principle of peaceful coexistence in international relations;
	the Caribbean crisis.
USSR under L. Brezhnev	Features of the political course of the country in 1964-1985, the strengthening
	of conservative trends, changes in the political system, the emergence of the
	dissident movement; economic reforms of the mid-1960s, their role and
	importance, the growing contradictions and imbalances in the economy; the
	development of the social sphere; achievements and problems in the
	development of culture; the transition from confrontation to détente, peace
	initiatives of the USSR, "Brezhnev doctrine", the aggravation of international
	tension at the turn of 70-80-ies.
USSR in 1985-1991.	Prerequisites and goals of perestroika, the essence and consequences of
Perestroika.	economic and political reforms; changes in the state structure; the concept of
	"new political thinking" in foreign policy; stages of Perestroika.
Collapse USSR and the	The collapse of the USSR and the formation of the CIS; the formation of a new
creation of CIS	Russian statehood; ways of socio-economic modernization of Russia; foreign
	policy in the 1990s.
Formation of modern Russia.	The socio-economic modernization of Russia; the country's foreign policy at the
Vladimir Putin.	beginning of the XXI century.
The role of RUDN as a "soft	Peace initiatives of the USSR in the postwar period, especially the opening of
power" in the international	the Peoples Friendship University in 1960, the mission of the University,
relations	especially the first rector – S. Rumyantsev, the second rector – V. Stanis, the
	third rector – V. Filippov.

Developers: Professor of the Department of Russian History

Yu.E. Belanovskaya

Head of the Department of Russian History

V.M. Kozmenko

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

The	The name of the discipline History of Medicine		
The amount of discipline		3 CU (108 hours)	
	Course description		
To	pics	Content of topics	
1	Introduction. Early kinds of healing	 1.1. The Formation of Human Society and Healing. 1.2. Healing and Cults during the Maturity of Pre-class Society. 1.3. Healing and Cults during the Decline of Pre-class Society. Cranium trepanation 1.4. Folk healing 	
2	Healing and Medicine in Ancient Civilizations	 2.1. Common characteristics. 2.2. Healing and Medicine in Ancient Mesopotamia (Sumer, Babylonia, Assyria). 2.3. Healing and Medicine in Ancient Egypt. 2.4. Healing and Medicine in Ancient India. 2.5. Healing and Medicine in Ancient China. 2.6. Healing and Medicine in Ancient Greece. 2.7. Medicine in Ancient Rome 	
3	Medieval Medicine (V–XV centuries)	 3.1. Medicine in Byzantine Empire (395–1453). 3.2. Medicine in Caliphates (VII–X centuries). 3.3. Medicine in Central Asia (X–XV centuries). 3.4. Medicine in Medieval Russia (IX–XV centuries). 3.5. Medicine in Medieval Western Europe (V–XV centuries). 	
4	Medicine in Early Modern Time (late XV – mid XVII century)	 4.1. Renaissance Medicine in Western Europe. 4.2. Medicine in Pre-Hispanic America. 4.3. Medicine in the Russian state (XV–XVII centuries) 	
5	Medico-Biological Sciences in Modern Time (mid XVII – early XX century)	5.1. Biology and Genetics.5.2. Anatomy.5.3. Histology and Embryology.5.4. Pathology.5.5. Microbiology.5.6. Physiology and Experimental Medicine.	
6	Clinical Medicine in Modern time (late XVII – early XX century)	 6.1. Internal Medicine (therapy) in Modern time. 6.2. Medicine and medical education in the Russian Empire. 6.3. Infectious diseases and Epidemics. 6.4. Problems and Progress of Surgery in Modern Time. 6.5. History of Nursing. 6.6. History of Dentistry. 	
7	Medicine and Public Health in the Twentieth century	 7.1. Nobel prize for Physiology or Medicine. 7.2. Russian Medicine in the late XIX – early XXI century. 7.3. International co-operation in the field of Public health and Medicine. 	

Developer:

Head of the Department for the History of Medicine, Professor

Law Institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

The name of the discipline	Law science	
The amount of discipline	3 CU (108 hours)	
Course description		
Topics	Content of topics	
1. Fundamentals of the law and state theory. 2. The Constitution of the Russian Federation as the basic law of the state. 3. Characteristics of the Russian legal system's branches.	Topic 1.1 The concept, features, functions of the state. State: theory of origin, features, functions. Theme 1.2 Forms of the state. Topic 1.3 Law in the system of social regulation. Subject 1.4 Rules and sources of law. Topic 1.5 Law system. Topic 1.6 Relationship. Topic 1.7 Offenses and legal liability. Topic 2.1 The Constitution, its role and place in the legal system of the Russian Federation. Topic 2.2 Legal status of a person and a citizen of the Russian Federation. Topic 2.3 The system of public authorities in the Russian Federation. Topic 2.4 Law enforcement agencies in the Russian Federation. Topic 3.1. Basics of Family Law of the Russian Federation. Topic 3.2. Fundamentals of civil law of the Russian Federation. Topic 3.3. Fundamentals of labor law of the Russian Federation. Topic 3.4. Fundamentals of criminal law of the Russian Federation. Topic 3.5. Fundamentals of administrative law of the Russian Federation. Topic 3.5. Fundamentals of administrative law of the Russian Federation. Topic 3.5. Fundamentals of administrative law of the Russian Federation. Topic 3.6 Basics of Environmental Law Topic 3.7 Basics of Medical Law	

Developers:

Professor of the Department of Judicial Authority, Law-Enforcement and Human Rights Activity

Badma V. Sangadzhiev

Head of the Department of Judicial Authority, Law-Enforcement and Human Rights Activity

Valery V. Grebennikov

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

The name of the discipline	Economics	
The amount of discipline	2 CU (72 hours)	
Course D	escription	
Name of sections (subjects) of discipline	Summary of sections (subjects) of discipline:	
Introd	luction	
Subject and method of Economics. General characteristic of market economy. Migroop	Definition of a concept of economy, objects and methodology. The problem of efficiency. Traditional, planned and market types of economic systems. Bases of a market mechanism.	
2. Supply and demand. Consumer behavior.	Definition and determinants of supply and demand, graphic interpretation, point of market balance.	
3. Production of economic goods. Production cost.	Factor of production. Production function. Production costs and profit	
4. Models of market structures	Perfect and imperfect competition, oligopoly, monopoly. Markets of resources.	
Macroe	conomic	
5. Main macroeconomic problems and indicators. Agregate demand and agregate supply	Main problems and indicators. Definition, determinants, components, graphic interpretation	
6. Economic growth and the economic cycle. Inflation and unemployment.	Types and factors of economic growth, role of the state. Types of inflation, the reasons for its occurrence. Antiinflationary policy. Causes and types of unemployment. State policy to combat unemployment.	
7. Monetary and fiscal politics	Types, factors, state regulation	
World economy		
8. World economy and international economic relations. Theories of international trade	The world economy, the main forms of international economic relations. Foreign trade. Exchange rate and balance of payments. Theories of international trade: Historical approach – consideration of theories of trade in development and evolution	
9. Globalization	Definition, problems and prospects	

Developers:

Associate professor of the political economy department of V.F. Stanis, PhD Econ. Head of the political economy department of V.F. Stanis, Dr.Econ.Sci., professor.

M.V.Melanyina

E.V. Ponomarenko

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The name of the discipline	Russian language (as Foreign Language)
The amount of discipline	3 CU (108 ac. hours)
	lescription
Topics	Content of topics
	TS CHARACTERISTICS
Theme 1. The structure of an object	Identification of components of an object Complete set of components: complete/ incomplete set of components.
	Presence / absence of a component (components) in the structure of an object; Quantitative characteristics of components of an object.
	Localization of components in an object; place of a component in an object; mode of localization of a component in an object; arrangement of components in an object; connection of components in an object
	Qualitative and quantitative composition of the object.
Theme 2. Qualitative and quantitative characteristics, properties of the object	The shape, relief of the surface of the object: the shape of the object; surface's relief of the object.
	The consistency, properties, color, taste, smell of an object: the color of an object; the taste and smell of the object; object consistency, object properties. Quantitative characteristics of the object: the exact size of the object; fluctuations in the size of the object; maximum object size.
Theme 3. The function of the object	Function of the object. The essence of the function. Conditionality of the function of the object.
Theme 4. Classification of objects	Classes of objects. Characteristic of classification and classes of objects. Members of object's class.

UNIT 2. BIOLOGICAL OBJECT (PATHOGENIC MICROORGANIZM) AND ITS CHARACTERISTICS		
Theme 1. General characteristics of the object	Structure of a microorganism. Localization of a biological object. Mode of nutrition of an organism. Mode of reproduction of an organism.	
Theme 2. Development (life-cycle) of a biological object	Host of a parasitic microorganism. Stages of life-cycle / development of a microorganism. Processes of a stage of a life-cycle.	
Theme 3. General characteristic of a disease caused by pathogenic microorganism	Identification of a disease caused by pathogenic microorganism. Area of the disease activity. Ways and conditions of infecting. Symptoms and signs of a disease. Clinical outcome. Disease prevention.	
UNIT 3. PHYSIOLOGICAL PROCESS AND ITS CHARACTERISTICS		
Theme 1 . General characteristic of a physiological process	Definition of a process. Classification of processes. Essence of a process. Stages of a process.	
Theme 2. Main mechanisms of a process	Alteration of qualitative and quantitative characteristics of an object. Appearance (birth) and disappearance (destruction, death) of a new object. Change of localization of an object (movement).	
Theme 3. Alteration dynamics of process	Alteration in the intensity of the process. Violation and termination of the process.	
Theme 4. Role of the physiological process	The significance of the process. The characteristic of the benefit / harm of the physiological process for the organism.	

Associate Professor of the Russian Language Department M.A. Makarova

Associate Professor of the Russian Language Department Yu.N. Biryukova,

Associate Professor of the Russian Language Department K.V. Akhnina

The head of Russian Language

Department of Medical Institute V.B. Kurilenko

Faculty of Philology

ANNOTATION OF ACADEMIC DISCIPLINE

Subject name	Latin language
Volume of discipline	3 CU (108 hours)
	Course description
Section title	Topics' Summary
<u>Phonetics</u>	Latin alphabet. Letters and sounds. Vowels and consonants. Diphthongs and digraphs. Pronunciation and rules of reading. Syllables. Stress. Features of Latin and Greek Spelling.
Anatomical and histological terminology	Noun. System of declensions. Grammar categories. Dictionary entry. Non-agreed attribute. Nominative and Genitive singular. Adjective. Grammar categories. Dictionary entry. Agreement between adjectives and nouns. Agreed attribute. Structure of anatomical terms. Comparative and Superlative degrees. Peculiarities in anatomical terminology. Anatomical term with agreed and non-agreed attribute. Third declension. Equal and non-equal nouns. Types of the third declension. Generic endings of masculine, feminine and neuter genders of 3d declensions' nouns. Nouns of the 4-5 declensions. Basic case endings and features. Plural number of nouns and adjectives. Multiword anatomical term. Exceptions.
Clinical terminology	Word formation in anatomical and histological terminology. The most common base prefixes and suffixes. Introduction into clinical terminology. Multiword clinical term. Translation rules. Greek and Latin roots, denoting certain meanings. Beginning parts of clinical term. Final parts of clinical term. Greek and Latin roots, denoting surgical operations and parts of the body. Greek and Latin roots, denoting anatomical formations. Final Greek parts, denoting disease, symptoms of the disease, pathological changes in organs and tissues, diagnosis and treatment methods. Greek and Latin roots, denoting various features and properties.

<u>Pharmaceutical</u>	The concept of drug, drug dosage forms. Main rules of	
terminology. Prescription.	forming of pharmaceutical term. The frequency segments that	
	are used in the names of drugs.	
	Prescription. Rules and exceptions. Verbs' phrases in	
	prescription line.	
	Chemical nomenclature. Oxides and acids. Name of salts in	
	pharmaceutical terminology.	

Associate Professor of foreign languages of Faculty of Philology M.A. Borodina

Head of foreign languages' Department of Philological Faculty

U.N. Ebzeev

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Psychology, pedagogigs	
Scope of discipline	2 CU (72 hour)	
Summary of	the discipline	
The name of the sections (topics) of the discipline	Summary of sections (topics) discipline:	
 Introduction to psychology. Psychoanalysis. Z. Freud. The development of the Psyche. Zoopsychology. Feeling Perception. Attention. Memory. Thinking. Speech Imagination. Will. Emotions. Personality The focus of the individual. Motives. Temperament. Character. Abilities. The makings. Communication Ethics. Deontology in medicine. Internal picture of the disease. Clinical aspects of communication. Conclusion 	 History of psychology. The subject and methods of psychology. Branches of psychology. Categories of psychology. Functions of the psyche. Basic mental processes. The history of psychoanalysis. Freud and his theory. The development of psychoanalytic trends. Neofreydizm (K. Jung, A. Adler, K. Horney). Post- Freud personality psychology (G. Allport, G. Murray, E. Erickson). Zoopsychology from ancient times to the creation of the first evolutionary theory. The main methods of zoopsychological research. The value of zoopsychology in medicine. Cognitive mental processes in the knowledge of reality. The perception of objects, the time of the relationship between objects of space, man. Attention arbitrary (active) involuntary (passive) post-arbitrary. Memory and its meaning. Types of memory The main processes and mechanisms of memory. Individual features of memory. The value of memory for human life. Types, forms, methods, operations, individual features of thinking. The development of thinking in ontogenesis. The laws of logic and thinking. Violations of thinking. Pathopsychological and clinical classification of thinking disorders. Types of imagination. Iatrogenesis. Pathological forms of imagination. 	

Types and functions of speech. The ratio of thinking and speech. Speech disorders.

- 7. Will. The concept of the will. Volitional acts. Functions will. The development of the will. Strong-willed personality traits.
- 8. The concept and classification of emotions. Theory of James-Lange. Emotions generated by the social environment. The role of emotions in the mental organization of man.
- 9. The concept of personality in various psychological approaches. Personality structure.

Levels, rules and methods for constructing psychological characteristics of a person.

- 10. Analysis of general concepts about the orientation of the individual. Classification of needs in the direction of the individual. Classification of motives in the direction of the individual. Definition of forms of orientation of the person.
- 11. Types of temperament and their psychological characteristics. The role of temperament in the activity. Character

The classification of character traits. Types of character. Accentuations of character.

- 12. Definition of abilities. Types of abilities. Ability structure. Ability levels. Talent. The makings and abilities. Addictions.
- 13. Relationship levels: doctor patient; doctor nurse; doctor doctor; a nurse is a patient; nurse nurse; doctor administration; doctor junior medical staff.
- 14. The concept of internal picture of the disease." The problem of theoretical modeling of the internal picture of the disease. The basic principles and methods of studying the internal picture of the disease.
- 15. Summing up the cycle.

Developers:

Professor of the Department of Psychiatry and Medical Psychology Associate Professor of the Department of Psychiatry and Medical Psychology Head of Department Psychiatry and Medical Psychology

M.S. Artemyeva

I.E. Danilin
I.V. Belokrylov

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Discipline name	Physics	
Discipline size	2 CU (72 hours)	
Course description		
Discipline sections (topics) names	Summary of sections (topics) of the discipline:	
MECHANICS	Some definitions relating to Motion. Uniform circular motion. Centripetal and Centrifugal forces. Newton's Laws motion. Weight of a Body. Weightlessness. Rotary Motion of a rigid body. Angular Momentum. Simple Harmonic Motion. Flow of Liquids. Bernoulli's Theorem.	
THERMODYNAMICS	Viscosity. Poiseuill's Formula. Surface Tension. Internal Energy. First law of Thermodynamics and its Applications.	
ELECTROSTATICS	Specific Heat. Adiabatic Process.	
CURRENT ELECTRICITY	Coulomb's Law. Electric Field and Potential. Electric Field Intensity due to a Point Charge and Spherical Charge of Uniform Surface — density. Electric Potential and Potential Difference. Electric Dipole. Potential of a charged Conductor. Capacitance and Capacitors. Dielectrics. Electric Polarisation of Matter.	

ELECTROMAGNETISM	
ELECTROMAGNETISM	Electric Cell. Ohm's laws. Kirchoff's Laws.
	Joul's Law.
	Jour 5 Law.
	Magnetic Effect of Current.
	Electromagnetic Induction. Faraday's Laws.
WAVE NATURE OF LIGHT	Motion of a Conductor in a Magnetic Field.
	Lorentz Force. Alternating Currents.
	Huygens'Wave Theory. Principle of
	Superposion. Constructive and Destructive
	Interferences.
ELECTRON PHYSICS	Coherent Sources. Diffraction of Light.
	Polarisation of light Waves.
	Photo-electric Effect. Photo-electric cells
	and their Applications.
	Light and ray optics
	Refraction of light at a plane interface. Total
	internal reflaction. Dispersion of light.
	Radiation and atomic physics
	Radiation. Structure of the atom. X-rays.
	Nuclear physics
	Radio-activity. Structure of the Nucleus.
	Nuclear Energy

Associate Professor of the Department of Theoretical Physics and Mechanics

Kovalchukov N.A.

Head of the Department of Theoretical Physics and Mechanics

Rybakov Yu.P.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Discipline	Mathematics
Volume of the discipline	2 CU (72 hours)
The sum	nmary of the discipline
Title of topics of the discipline	Summary of topics of the discipline
Matrices	Matrices, matrix operations. Inverse matrix. Finding the inverse matrix.
Systems of linear equations	Systems of linear equations. Equivalent systems. Elementary transformations of systems, their properties. Reduction of systems to a step form by
	the Gauss method. Investigation and solution of stepped-type systems. Jordan Method
Determinants	Determinants. Calculating determinants. Cramer's rule for solving systems of linear equations.
Vector algebra	Vector operations. Scalar, vector, mixed product of vectors. Properties Calculation in coordinates.
Beginning of Analytical Geometry	Equations of a line in space and on a plane. Equation plane. Mutual arrangement of straight lines and planes. Geometric problems.

Developers:

Associate Professor, Ph.D.

Popov A.M.

Head of the Department of Nonlinear Analysis and Optimization

Arutyunov A.V.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Discipline name	Medical Informatics	
Total hours	3 Credits (108 hours)	
	Discipline short content	
Module name	Module short content:	
GENERAL INFORMATION ABOUT COMPUTERS	The concept of information, representation information in the computer. Computer architecture, main units of IBM PC (system unit, keyboard, monitor), principle of open architecture. Input devices (keyboard, mouse, scanner, joystick, and digitizer). Output device (monitor, printer, plotter). Memory: temporary, permanent, long-term. Types of software (system software, applications, programming systems), file archiver (Zip, Arj, Rar), virus protection programs. Architecture "thin client".	
WORD PROCESSING TECHNOLOGIES	Structure of the Program Writer, basic control elements: title bar, menu bar, toolbar, control line, status bar, scroll bar, document window, indicators (input cursor, mouse). Creation, saving and closing the document, work with windows search a saved document. Menu structure (File, Edit, View, Insert, Format, Tools, Table, Window). Entering text. Symbols formatting (changing the tracing, font type and size), paragraph formatting (set line spacing, paragraph alignment), tabulation, preview.	
NUMERIC PROCESSING TECHNOLOGIES	Running CALC, main components of the program: title menu, toolbar, string of formulas, worksheet labels, status bar, the working area. Working area of the program: columns and rows, cells, workbooks and worksheets. Cells addressing. Types of data used in the CALC. Entering and editing data. Cells formatting.	
DATABASE MANAGEMENT SYSTEM	The concept of a database, database management system, relational databases. Structure of a relational database: table, record, field. Types of data. OpenOffice Base database, basic elements of the OpenOffice Base database: tables, forms, reports, queries, macros, modules. Table Design, Form Wizard. Creating database in OpenOffice Base. Editing field properties, key fields. Direct data input into the table using the input form.	

NETWORK TECHNOLOGY

Types of computer networks: local, corporate network. Network Architecture: router, gateway, service provider, server, modem, dedicated network. Addresses, IP-address. Web (World Wide Web or WWW), Web-pages. Home pages. Searching information on the WWW, search systems, browser (Navigator) Mozilla Firefox. The Uniform Resource Locator (URL), keywords, types of information resources. Protocols

HTTP, FTP, packets, checksum. Hypertext Markup Language (HTML). Medical Internet resources.

Developers:

Professor V.D. Protsenko

Associate Professor E.A. Lukianova

Associate Professor T.V. Lyapunova

Head of Department

Medical informatics and telemedicine V.L. Stolyar

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name	Chemistry	
Volume	3 CU (108 h)	
Discipline short content		
Topics	Content	
Structure of the matter	Electronic configuration of atoms and ions. Periodic Law. Chemical bonds.	
Chemical thermodynamics and chemical kinetics	Basic thermochemistry. Enthalpy. Hess's Law. Entropy. Gibbs's energy. Conditions for simultaneous reactions. Rates of chemical reactions. Chemical equilibrium. Shifting of the chemical equilibrium. Adsorption and catalysis.	
Chemical reactions in solutions	Concentration units. Electrolytic dissociation. Acid-base properties of the compounds with respect to the character of their dissociation. Ampholytes. Ionic reactions. Conditions for the reactions of ionic exchange.	
Chemical equilibria in solutions	Weak electrolytes. Dilution law. Strong electrolytes. Activity and activity coefficient. Ionic strength. Ionic product of water. pH. Buffer solutions. Hydrolysis of salts. Solubility product constant. Solubility. Conditions for formation and dissolution of the precipitates. Colloid solutions.	
Classes of inorganic compounds	General classes of the inorganic compounds. Double oxides. Ceramics.	
General properties of metals	General physical and chemical properties of the metals. Alloys.	
Electrochemical processes	Electrochemical processes. Galvanic cells. Electrochemical corrosion.	
Introduction to organic chemistry	General principles of the theoty of the structure of organic compounds. Isomerism. Classes of organic compounds. Mechanisms of organic reactions.	
Hydrocarbons	Saturated and unsaturated hydrocarbons: general reactions of alkanes and alkenes. Polimerization of conjugated dienes. Aromatic compounds. Electrophylic substitution in the aromatic ring.	
Alkohols and phenols	Alkohols. Hydrogen bond. Reactivity of alkohols. Phenol. Acidic properties of phenols.	
Carbonyl containing organic compounds	Aldehydes and ketones. Electronic structure of the carbonyl group. Reactions of carbonyl compounds.	
Carboxylic acids and their derivatives	Carboxylic acids. Structure of the carboxylic group. Derivatives of carboxylic acids: salts, halogen anhydrides, amides, nitriles, esters. Lypids and phospholypids. Optical isomerism of lactic and tartaric acids.	

Amines	Amines. General properties of amines, their biological significance and application.	
Aminoacids	Aminoacids as peptide components: classification, structure, nomenclature, stereoisomerism, acid-base properties, formation of zwitter ions. Chemical properties of aminoacids.	
Peptides	Peptides. Primary structure. Partial and full hydrolysis.	
Hydrocarbons	Hydrocarbons. Natural occurrence. Significance of hydrocarbons. Photosynthesis. Monosaccharides. Cycle-chain tautomerism. Reducing and non-reducing disaccharides.	
Heterocyclic compounds	Biologically significant heterocyclic systems. Nucleic acids and bases.	

Developers: Professor, department of General Chemistry. D.Sc.

Kovalchukova O.V.

Chief, Department of General chemistry, D.Sc.

Davidov V.V.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Discipline	Biochemistry - biochemistry of oral cavity
Volume of the discipline	6 credits (216 hours)
	Course Description
Content of the items	Course Description
Proteins: structure, properties, functions. Complex proteins, Nucleic acids, Enzymes.	Biomolecules. The most important problems of current biochemistry. Methods of investigations <i>in</i> biochemistry. Biochemistry and Medicine. Structure and Function of Biomolecules. Proteins - essential constituents of the living cells. Physical and chemical properties of proteins. Composition and properties of amino acids and peptides. Four levels of structural organization of proteins. The three-dimensional structure of proteins; role of domens and the relationship of proteins structure to their biological functions. Methods of isolation and purification ojf proteins. Classification of proteins: simple and conjugated proteins, composition and properties of individual representatives of conjugated proteins. Nucleic acids. Physico-chemical properties, composition, structure and biological role of DNA andRNA. Enzymes: general properties, chemical structure, active centers, classification and nomenclature, allosteric enzymes. The mechanisms of enzymatic catalysis. Structure and function of coenzymes, Kinetics of enzymatic reactions and methods for determination of the enzymes activity, Inhibitors of enzymes, Isoen-zymes. Regulation of the enzyme activity, Diagnostic enzymoiogy; enzymes as drugs.
Molecular mechanisms of regulation. Lipids: structure, properties, functions. Biological membranes	Vitamins: distribution, biological role, classification. Social basis of vitamin deficiency in some developing countries. Principles of vitamin therapy. Antivitamins. Composition and properties of individual representatives of the fat-soluble and witer-soluble vitamins: A, D, E. K, B1, B2, B6, B12, C, P, PP, H and Folic acid, Vitamin-like substances. Methods of quantitative determination of vitamins in the body. Hormones: hormone production in the endocrine glands. Molecular endocrinology. Mechanisms of hormonal regulation of metabolism and role of the second messengers, Chemical structure and properties of die main hormones. Hydrolyzable lipids. Non-hydrolyzable lipids. Biological roles. Fatty acids and fats. Structure of phospholipids and glycolipids. Isoprenoids. Sterols. Steroid hormones. Bile acids.
Energy metabolism. Carbohydrate metabolism.	Carbohydrate metabolism: pathways of absorbed monosaccharaides. The pathway of glycogen synthesis and degradation. Anaerobic metabolism: glycolysis, glycogenolysis and gluconeogenesis. Aerobic metabolism: pentose phosphate pathway of glucose oxidation; oxidative decarboxylation. of pyruvate, the tricarboxylic acid cycle. Biological oxidation, The respiratory chain of electrons and protons transport, Oxidative phosphorylation. Energy effect of anaerobic pathways of carbohydrate metabolism. Hormonal regulation of carbohydrate metabolism. Pathology of carbohydrate metabolism.
Lipid metabolism.	Lipid metabolism: pathways of the absorbed products lipid digestion, Mechanism of boxidation of fatty acids, Biosynthesis of fatty acids, triacylglycerols, phospholipids and cholesterol. Energy effect of lipid oxidation, Relationship between lipid metabolism and carbohydrate metabolism. Intracellular lipids and blood serum lipids. Regulation of lipid metabolism, Pathology of lipid metabolism.
Protein catabolism. Amino acid metabolism.	Protein metabolism,' dynamic state of body proteins. Nitrogen balance. Problems of adequate, balanced nitrogen nutrition. Proteolysis. Absorption and active transport of ammo acids. Pathway of amino acids metabolism in the body: reactions of deamination, decarboxylation, transamination and hydroxylation. Degradation of tissue proteins. Urea cycle.

Metabolism of conjugated proteins.
Biochemistry of organs and tissues.

Metabolism of nucleoproteins and chromoproteins. Biosynthesis and decomposition of heme. Synthesis of purine and pyrimidine nucleotides. Metabolism of individual amino acids. Regulation of protein metabolism, Pathology of protein metabolism, Relationship of protein metabolism with metabolism of lipids and carbohydrates. Blood: composition and functions. Cellular elements. Blood plasma: composition. Plasma proteins. Carrier electrophoresis. Erythrocyte metabolism. Distribution of iron. Hydrogen ion concentration in the blood. Urine formation. Organic components and Inorganic components of the urine. Functions in the acidbase balance: Proton excretion and Ammonia excretion. Electrolyte and water recycling. *Biochemistry of connective tissue. Biochemistry of mineralized tissue. Biochemistry of saliva.*

Developers:

Professor of the Department of Biochemistry.

Acad. Berezova T.T. Lukasheva E.V

Associate Professor of the Department of Biochemistry.

Acad. Berezova T.T. Lobaeva T.A.

Head of the Department of Biochemistry.

Acad. Berezova T.T. Chernov N.N.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

The discipline	Biology
The number of credits (hours)	5 CU (180 h)
	f the discipline
Topics	The content
Biology is the science of life. The cell as a structural and functional unit of living things	Methods which are used in modern biology. Structure of prokaryotic and eukaryotic cells. The cell theory. The flow of information and energy in the cell.
2. The genetic material	Structure and functions of nucleic acids. DNA replication. Mutations.
3. Gene expression. Organization of genomes	Transcription and translation. Control of gene expression in prokaryotic and eukaryotic cells. Organization of prokaryotic, eukaryotic and viral genomes.
4. The cytological basis for the growth and reproduction	Chromosomes, karyotypes. Gene, genotype, phenotype. Allelic and non-allelic, linked and non-linked, pleiotropic and lethal genes. Penetrance and expressivity. Types of gene interaction. The life cycle of cells, the mitotic and meiotic cell divisions. Control of the cell cycle. Types of reproduction. Ontogenesis.
5. The laws of heredity	The history of genetics. The laws of heredity.
6. Human genetics	Methods of human genetics. Hereditary diseases and their causes. Principles of diagnosis, treatment and prevention of hereditary diseases. Genetic counseling.
7. Medical Parasitology	The diversity of the organic world. Parasitism as an ecological phenomenon. Human parasites, vectors, hosts and reservoirs of pathogens.
8. Biological evolution	Biological evolution. Theories of evolution.
9. The Humans and the Biosphere	Ecosystems. Medical aspects of environmental control.

Developers:

Associate professor of the Department of biology and general genetics

Gigani O.B.

Head of the Department of biology and general genetics

Azova M.M.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Discipline name	Human anatomy - anatomy of Head and
	neck
Discipline size	9 CU (324 hours)
Course d	escription
Discipline sections (topics) names	Summary of sections (topics) of the discipline:
Human anatomy	Introduction into Human anatomy. Main anatomical definitions. Skeletal system: bone as on organ; classification, functions, development and structure of bones, structure of vertebrae, sacrum, coccyx, ribs, thorax, upper and lower limb bones. Articulations system: classification: structure, development and classification of joints; bone articulations of the chest, shoulder and pelvic girdle articulations, free upper and lower extremities. Muscular system: muscle as an organ; classification of muscles, topography and accessory apparatus, back muscles, chest and abdominal muscles, the diaphragm; muscles of the upper and lower limbs. Structure, development and functions of digestive, respiratory, urinary, male and female reproductive systems, endocrine glands. Cardiovascular system: structure of the heart, vessels of the systemic and pulmonary circulation. Lymph outflow pathways. Lymphoid system. Nervous system: central part – brain and spinal cord; peripheral part – spinal nerves, brachial and lumbosacral plexus. Innervation of the locomotor apparatus and body coverage. Autonomous nervous system: innervation of the internal organs. Sense organs anatomy: vision, hearing and balance, taste, smell.

Head and neck anatomy	The skull and articulations of the skull.
	Muscles, fasciae and cellular tissue spaces of
	the head and neck. Oral cavity anatomy.
	Structure, development and anomalies of the
	teeth. Incisors, canines, premolars and molars.
	Deciduous teeth. Blood supply, blood and
	lymph outflow from the organs of head and
	neck. Blood supply of teeth. Cranial nerves.
	Cervical plexus. Head and neck organs
	innervation. Teeth innervation.

Head of Department of Human Anatomy Professor V.I. Kozlov

Professor of Human anatomy T.A. Tsekhmistrenko

Associate professor of Human anatomy L.V. Naumetz

Associate professor of Human anatomy T.V. Kokoreva

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The Disciplin	ne	Histology, embryology, cytology – Histology of Oral Cavity
The amount of the discipline		6 Credits (216 hours)
	Summary of the discipline	
The name of the sections	Brief contents of	sections (subjects) of the discipline
of the discipline		
1.Introduction. Cytology.	Cytology and Hist preparations of the slides. The technom The cell. Organel components of the cell populations.	
2. Basic Embryology. Human Embryology.	Conceptions of morphogenesis. It cells. Mesenchyr Embryonic deve	eiosis. Fertilization, cleavage, gastrulation. of determination, cell differentiation, induction interaction and directed migration of me, ectoderm, endoderm. Provisory organs. elopment of human. Placenta: formation, al barrier. The system: mother-placenta- fetus, ag factors.
3. Basic Histology	The concept of general character characteristic. Gl internal environment the differential let Physiological reg <i>Immunity</i> . Immunitissue proper. Ske smooth, and crost <i>Nerve tissue</i> . Nerve concept of the ref	"Tissue". Classification of tissues, and their ristics. <i>Epithelia</i> . Differon: its structure and ands. Types of secretion. The system of the ent tissue. <i>Blood and lymph</i> . The hemogram and ukocytes count. Age and sex features of blood. generation of blood and lymph. <i>Hemopoiesis</i> . cocompetent cells. <i>Connective tissue</i> . Connective eletal tissues: cartilage, bone. Muscle tissues: s-striated (skeletal, cardiac). Muscle as organ. we fibers: structure, types. Nerve endings. The lex arc.
4.Systemic Histology	structure, function features and rege system of organs. central nerve system. The general princing The organ of vising and equilibrium. The classification. Art	oted to learning of development, morphologic ons, innervation, blood supply, age-related nerative capabilities of the human organs and <i>The Nerve System</i> . Organs of the peripheral and em. <i>Sensory System</i> (Organs of Special Senses). ple of cellular organization of the receptor parts. on. The olfactory organ. The organ of hearing <i>The Circulatory System</i> . Blood vessels: structure, eries. Veins. The vessels of Lymphatic vessels. The heart. <i>The system of</i>

organs of hemopoiesis and immune defense. The central and peripheral organs of hemopoiesis and immunogenesis. Red bone marrow, thymus, lymph nodes, spleen. Inflammation, healing, recovery. Immune responses. The Digestive System. The general principles of the structure of digestive canal. Pharynx and esophagus. Stomach. Small intestine. Large intestine. Appendix. Pancreas. Liver. Gallbladder and bile ducts. The Respiratory System. The conductive portion and the respiratory portion. Nasal cavity, nasopharynx, larynx, trachea, the bronchial tree, the lung. Air-blood barrier. The Integumentary System. The skin. The skin' types. The skin' derivatives. Sebaceous and sweat glands. Hairs. Nails. *The Endocrine System*. The central and peripheral parts of the endocrine system. Hormones and their classification. The hypothalamus-hypophysis system. The epiphysis. The thyroid gland. The parathyroid gland. The adrenal glands. Diffuse neuroendocrine system. The Urinary System. Kidneys. Nephron as functional-structural unit of the kidney. Filtration barrier. Endocrine apparatus of the kidney. The urinary tract. The urinary bladder. *The Reproductive Systems*. The male reproductive organs. Testis. Spermatogenesis. Prostate gland. The female reproductive organs. Ovary. Oogenesis. Uterus. Mammary Gland. The cyclic changes in the female reproductive system. Oral cavity. The general characteristics. Types of mucosa.

5. Histology of Oral Cavity

Oral cavity. The general characteristics. Types of mucosa. Orthokeratosis. Parakeratosis. Gingiva. Hard and soft palates. Lips. Cheeks. The floor of oral cavity. Tongue. Lingual papillae. Taste apparatus. Lymphoid structures. Glands of oral cavity. Teeth. Hard and soft tissues of a tooth. Enamel, dentin, cementum, pulp. The periodontium. Periodontal ligament. Odontogenesis and growth of deciduous and permanent teeth. Dentinogensis, enamelogenesis, cementogenesis, development of pulp and alveolar bone. Tooth eruption. The changing of tooth generations. Age-related changes, physiological and reparative regeneration of tooth tissues.

Developers:

Associate Professor, Department of Histology, Cytology, Embryology

O.B. Savrova

Associate Professor, Department of Histology, Cytology, Embryology

I.Z. Eremina

Head of the Department of Histology, Cytology, Embryology

I.Z. Eremina

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Normal physiology, physiology of maxilla-facial region
Amount of discipline	5 CU (180 h)
Summary of discipline	
The name of the partition (s) discipline	Summary of sections (themes) discipline
Physiology of blood	Functions and composition of blood. Formed elements of blood. Leukocytes. Red blood cells. Blood groups. Rh factor. Blood clotting The constancy of the internal environment (homeostasis). Constants of the blood.
Physiology excitabletissue	Excitability and its parameters. Properties of nerve fiber, nerve. The physiology of the synapse. Physiology of the muscles. Tetanus.
Physiology hearts andvessels	Cardiac cycle. Distribution of excitement in the heart. Conductive system of the heart. Properties of the heart muscle. Extrasystole. Physiology of blood vessels. Basic laws of hemodynamics. Microcirculation and lymph flow .Nervous and humoral regulation of the heart and vascular tone.
The physiology of respiration. Metabolism and energy. Power. Thermoregulation	External breathing Lung volumes and capacities. Gas exchange in the lungs. Transport of gases by blood. Regulation of breathing. Metabolism and energy. Nutrition. Temperature homeostasis, the mechanisms of its maintenance.
Physiology digestion	General concepts of digestion. Motor functions of the digestive tract. The secretory function of the digestive tract is the absorption of nutrients. Regulation of the gastrointestinal tract.
Physiology discharge	The system of organs of excretion. Urine formation in the kidneys. Non-educational functions the kidneys .
Central nervous system	Features of the spread of excitation in the central nervous system. Reflex. The main properties of the nerve centers. Braking in the central nervous system. The role of thevarious departments of the central nervous system.
Vegetative nervous system. Endocrine glands	Sympathetic and parasympathetic nervous system. General and particular physiology of endocrine glands.
Higher nervous activity Physiology Analyzers	Conditioned reflex and its neurophysiological mechanisms .Types of inhibition in the cerebral cortex.

	<u>, </u>
	Higher mental functions. Memory mechanisms.
	Physiology of view. Physiology of hearing and
	vestibular apparatus. Skin, taste, olfactory analyzers.
The structure and function of the	Oral physiology and its relationship with other
organs of the maxillofacial region	biological and clinical disciplines. The history of the
	development of the physiology of the maxillofacial
	region
Digestion in the mouth.	Mechanical processing of food. Chewing
	biomechanics.
Digestive, secretory and	The composition and properties of saliva. The
excretory function of the salivary	physiological significance of oral and gingival
glands.	fluids.
The protective function of the	Motor and secretory components of protective
organs of the	reactions. Buffer, bactericidal and anti-toxic properties
maxillofacial region.	of saliva. Factors specific and nonspecific
	resistance.
Sensory function of the	The concept of a dental analyzer. Receptors tactile,
maxillofacial region.	temperature, taste analyzers.
	Pain sensory system of the maxillofacial region.
Communicative function of the	The role of facial expressions in the communicative
organs of the maxillofacial region.	function.
The problem of	The interaction of the organs of the maxillofacial region
adaptation and	with various systems of the body. Age features of the
compensation in	physiology of the maxillofacial region. The problem of
dentistry.	adaptation and compensation in dentistry.

Associate Professor of the Department of normal physiology

Yu.P. Starshinov

Professor of the Department of normal physiology V.I. Torshin

Head of the Department of normal physiology, Professor V.I. Torshin

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of discipline	Microbiology, Virology – Microbiology of
	the oral cavity
The amount of discipline	6 CU (216 hours)
Course summary	
The names of the categories (themes) of	Chapter headings (themes) of discipline:
discipline	
General Microbiology	The subject and tasks of Microbiology.
	Taxonomy and nomenclature of
	microorganisms. The morphology and
	chemical composition of microorganisms. Physiology and biochemistry of
	microorganisms. Genetics of microorganisms.
	Fundamentals of General and medical
	microbial ecology. Microbiological and
	molecular biological basis of chemotherapy of
	infectious diseases.
General Virology	The structure of viruses, the interaction of
	viruses with cells, reproduction of viruses.
	Bacteriophages.
The doctrine of infection	Infectious disease. Stage of development and
	clinical manifestations of infectious diseases.
	The concept of sepsis, bacteremia, toxemia,
	septicopyemia. Bacteriocarrier process. The
	concept of pathogenicity and virulence of
	microbes. The main factors of pathogenicity.
Delegate Missackish and	Units of virulence.
Private Microbiology	Medical bacteriology. Resident and pathogenic cocci: staphylococci, streptococci, Neisseria.
	Causative agents of respiratory infections:
	diphtheria, pertussis and parapertussis,
	tuberculosis and leprosy. Pathogenic and
	resident anaerobic bacteria: pathogens of gas
	gangrene, tetanus and botulism. The causative
	agents of zoonotic diseases: plague, tularemia,
	anthrax and brucellosis. The causative agents
	of intestinal infections: typhoid fever,
	dysentery, salmonellosis, echrishiosis, cholera
	and yersiniosis. Agent of spirochetosis.
	Pathogenic Rickettsia. The causative agents of
	chlamydiosis. Morphology and physiology of
	fungi. The causative agents of superficial and
	systemic mycosis. Mycoses caused by
	opportunistic fungi. Medical protozoologyand

	Virology.
Microbiology of the oral cavity	Resident microorganisms of the oral cavity. The flora in odontogenic inflammation: pulpitis, periodontitis, abscess, cellulitis, osteomyelitis, sepsis. Opportunistic processes in the oral cavity. Candidosis, recurrent aphthous stomatitis, glossitis, gingivitis. The role of oral cavity microflora in the pathogenesis of caries and inflammatory processes in parodonte. Age-related changes of the microbial flora of the oral cavity. The influence of prostheses, filling materials, medicines.

Developers:Associate Professor of the Department of Microbiology and Virology

Yashina N. V

Head of the Department of Microbiology and Virology

Mikhailov M.I.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Pharmacology
The scope of discipline	5 CU (180 h)
Cour	rse summary
The names of the categories (themes)	Brief content of the themes:
1. Recipe. General pharmacology	Formulation. The types of prescription drugs. Rules of prescribing. Basic principles of pharmacodynamics drugs. The basic principles of pharmacokinetics of
2. Drugs affecting the afferent and efferent innervation	drugs. Types of drug interactions. Drugs affecting the afferent innervation. Local anesthetics. Cholinergic means. Adrenomimetic and simpatomimeticakih funds. Adrenoliticheskoe and simpatoliticescoe funds. Pharmacokinetics and pharmacodynamics of groups of drugs. Indications, contraindications, drug interactions groups of drugs. The interaction of groups of drugs
3. Drugs affecting cardiovascular system	Diuretics. Lipid-lowering drugs. Antihypertensive drugs. Antianginal drugs. Anti-arrhythmic drugs. Drugs used in heart failure. Pharmacokinetics and pharmacodynamics of groups of drugs. Indications, contraindications, drug interactions groups of drugs.
4. Drugs influencing haemostasis and haematopoiesis.	Drugs affecting the blood coagulation system. Drugs affecting the hematopoietic system. Pharmacokinetics and pharmacodynamics of groups of drugs. Indications, contraindications, drug interactions groups of drugs.

5. Medicines that affect the function of the respiratory system, digestive system and metabolism drugs influencing functions of the respiratory system.	Drugs influencing functions of the digestive system. Hormones of the pituitary gland, hypothalamus, epiphysis, thyroid and pancreas. Hormonal preparations of steroid structure. Drugs affecting the immune processes. Anti-allergic medicines. Pharmacokinetics and pharmacodynamics of groups of drugs. Indications, contraindications, drug interactions groups of drugs.
6. Drugs affecting Central nervous system.	Agent for anesthesia. Painkillers drugs. Sedatives. Hypnotics. Anxiolytics. Anti- epileptic means. Antipsychotics. Antidepressants. Drugs used in neurodegenerative diseases. The psychostimulants. Nootropic drugs. Pharmacokinetics and pharmacodynamics of groups of drugs. Indications, contraindications, drug interactions groups of drugs.
7. Antibacterial, antiviral and antifungal medicines.	Antibiotics. Synthetic antimicrobial agents. Antiviral, antifungal medicines. TB funds. Antiprotozoal, drugs antisyphyllitic, a sedative. Pharmacokinetics and pharmacodynamics of groups of drugs. Indications, contraindications, drug interactions groups of drugs

Associate Professor of the Department of General and Clinical Pharmacology

Gushchina Yu.Sh.

Head of the Department of General and Clinical Pharmacology

Lepakhin V.K.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of discipline	Immunology, clinical immunology
The amount of discipline	4 CU (144 hours)
Course s	summary
The names of the categories (themes) of discipline	Chapter headings (themes) of discipline:
Structure and function of the immune system	Anatomy and Cytology of the immune system. Factors of nonspecific resistance of the organism (R. phagocytosis, complement system, etc.). Cytokines. The concept of "antigen". Antigens of animal origin and bacterial cells. Classification of antigens. The basic properties of a complete antigen and hapten. The antigens of bacterial cells. Antigenic determinants (epitopes) of bacteria and types of antigenic specificity. Superantigen. Antibodies, their nature and function. The structure of immunoglobulins of different classes. The concept about the active centre of the antibody. Primary and secondary immune responses. Three cell system cooperation in the immune response. Class of the immune response. Evaluation of human immune status.

Allergy The concept of Allergy and its types. development Mechanisms of hypersensitivity of immediate and delayed types. Infectious Allergy. Primary and secondary immunodeficiency. **Immunodeficiency** Autoimmune disease. Basic concepts of transplantation immunity. Mechanisms of transplantation and The antigens of histocompatibility. The antitumor immunity mechanisms of antitumor immunity. **Immunodiagnostics** Serological reaction. Reaction of agglutination and of precipitation, variations. Reaction with labeled antibodies (the immunofluorescence reaction. the reaction of indirect immunofluorescence, ELISA, radioimmunoassay). Complement dependent reactions (lysis bacteria test, complement

fixation test).

Immunoprophylaxis and immunotherapy

Bacterial preparations for prophylaxis and serotherapy of infectious diseases. Vaccines, toxoids, anti-toxic serums, immunoglobulins.

Developers:

Associate Professor of the Department of Microbiology and Virology

Yashina N. V

Head of the Department of Microbiology and Virology

Mikhailov M.I.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

4 hours) arse description. tent of sections of discipline e cell damage. Pathology of protein metabolism. of fat and mineral metabolism. Disruption of pigment m. Irreversible cell
tent of sections of discipline e cell damage. Pathology of protein metabolism. of fat and mineral metabolism. Disruption of pigment m. Irreversible cell
e cell damage. Pathology of protein metabolism. of fat and mineral metabolism. Disruption of pigment m. Irreversible cell
of fat and mineral metabolism. Disruption of pigment m. Irreversible cell
of fat and mineral metabolism. Disruption of pigment m. Irreversible cell
Necrosis. Apoptosis
ry disorders: Shock Thrombosis. Embolism. c anatomy of compensatory and adaptive processes. tion and wound healing. Pathologic conditions of the system. Acute inflammation. Chronic tion.
f the epithelium. Tumors of mesenchymal and nal origin.
stosis. Anemias.
erosis. Ischemic heart disease. Hypertensive vascular
c diseases. Heart defects.
erosis. Ischemic heart disease. Hypertensive vascular
c diseases. Heart defects. Kidney diseases. Diseases of and digestive tract.
characteristics of infectious diseases. Bronchitis acute
monia. Influenza. Diphtheria. Scarlet fever. Measles. ction. Tuberculosis. Sarcoidosis. Mycosis. Syphilis. Scleroma. Quarantine infections.
and tumor-like diseases of skin of head and neck.
nembrane of mouth and lips. Non-tumoral lesions of
ry glands. Tumors of salivary glands. Pathology of
les of tooth, pulp and periapical tissues of the tooth. al disease. Diseases of jaw bones. Odontogenic Sepsis.

Developers:

Associate professor of the Department of Pathologic Anatomy

Ivina A.A.

Head of the Department of Pathologic Anatomy

Babichenko I.I.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The name of discipline	Pathophysiology – pathophysiology of
	head and neck
General labour intensity	5 CU (180 hours)
	discipline
The name of course themes	Course Description:
 General nosology Ecologic pathophysiology Cell pathophysiology Standard pathological processes Standard metabolic disorders Extreme states Blood pathophysiology Pathophysiology of cardiovascular system Pathophysiology of respiratory system Pathophysiology of a gastrointestinal tract Pathophysiology of secretory system Pathophysiology of endocrine system Pathophysiology of nervous system and higher nervous activity 	1. Conception about health and disease; definition of patho- and sanogenesis. Civilization diseases; chronopathology. 2. Pathology of biomembranes and organelles of the cell; types and mechanisms of cellular death; violations of biorhythms of the cell. 3. Disorders of local blood circulation; inflammation; immunity, immunopathology; allergy. Features of allergic reactions to the materials used in dentistry. Pathophysiology of tumor growth. Hypoxia. Pathogenesis of parodont diseases due to the deficiency of oxygen in tissues. 4. Carbohydrate, fatty, proteinaceous, purine, pathology of a thermal exchange of an organism; pathology of a water-salt exchange, hypostases; acid and main condition of an organism. Disturbances of protein metabolism in cariogenesis. Influence of imbalance of carbohydrate metabolism on the course of diseases in the oral cavity. 5. Pain, stress; shock; collapse; coma; clinical and biological death. 6. Diseases of red blood; diseases of white blood; hemorrhagic diathesis. Oral manifestations and its pathogenesis. 7. Arrhythmias; coronary heart disease; complications of a myocardial infarction; heart diseases; cardiomyopathy; myocarditis; endocarditis; pericarditis; heart failure. Pathophysiology of a vascular wall. 8. Respiratory failure; asphyxia; emphysema of lungs; a swelled lungs; bronchial asthma; pneumothorax.

9. Stomach ulcer of a stomach and
duodenum; pathophysiology of a liver and
bile ducts; pancreas pathophysiology;
intestinal impassability.
10. Nephrotic syndrome; the acute and
chronic diffusion glomerulonephritis;
pyelonephritis; renal lithiasis; chronic renal
failure; uremia; renal coma.
11. Pathophysiology of hypothalamic-
pituitary-adrenal systems, thyroid and
parathyroid glands, parathyroid glands, a
thymus, an epiphyses, sexual glands. Oral
manifestations and its pathogenesis.
12. Pathophysiology of functional neurosis;
pathological reflexes; pathophysiology of
sleep disorders; pathophysiology of violations
of memory.

Developers:

Professor of V.A. Frolov Department of general pathology

and pathological physiology E.A. Demurov

Associate professor of V.A. Frolov

Department of general pathology and pathological physiology

E.V. Velichko

Head of V.A. Frolov Department of general pathology and pathological physiology

M.L. Blagonravov

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of discipline	Hygiene
The volume of the discipline	3 CU (108 hours)
Summary of the discipline	
The name of the discipline	Summary of the discipline sections (themes):
sections	
Hygiene of nutrition	Hygienic principles of rational nutrition and features of the requirements for rational nutrition of different population groups. Dietary, therapeutic and prophylactic, preventive nutrition. Sanitary-hygienic examination of products (principles, conclusions). Food and biological value, safety of products of animal and vegetable origin. Methods of preserving food products and sanitary-hygienic examination of canned food and concentrates. Food poisoning and their prevention. Sanitary and hygienic examination of projects of public catering establishments.
Communal hygiene	Hygienic significance of factors acting in populated areas. Water as a factor of the external environment, its hygienic and epidemiological significance. Hygienic assessment of sources of water supply and drinking water. Methods of cleaning, decontamination and methods for improving the quality of drinking water. Methods of fluorination and defluorination of water. The role of soil in the transmission of endemic, infectious and parasitic diseases. Hygienic assessment of soil quality. Hygienic bases and requirements for cleaning of populated areas. Hygienic assessment of the layout of populated areas. Hygienic assessment of the microclimate, chemical composition and microbial contamination of indoor air. Hygienic assessment of insolation, natural and artificial illumination of premises. Radioactivity. Sources and types of radiation. Natural background radiation. Methods of radiometry of environmental objects. The dose of ionizing radiation. Methods of dosimetry. Determination and hygienic assessment of the radiation dose. Protection of the
Occupational hygiene	population from ionizing radiation. Basics of occupational hygiene. Physiological basis of the labor process. Hygienic assessment and prevention of physical factors in the production environment: aerosols, chemical and biological factors of the production environment. Hygiene of labor of medical workers in the dental profile.

Hygiene of medical organizations	Hospital hygiene. Features of structural and planning
	decisions of medical and preventive institutions, dental
	polyclinics. Prevention of nosocomial infections in dental
	practice.
Hygiene of children and teenagers.	Hygienic assessment of the health and physical
Hygienic basis of a healthy	development of children and adolescents. Healthy lifestyle
lifestyle	and personal hygiene.

Developers:Associate Professor of Public Health and Hygiene, PhD,
Associate Professor

L.V. Maksimenko

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Public Health & Public Health Services	
The volume of the discipline	2 CU (72 hours)	
Summary of the discipline		
The name of the discipline Summary of the discipline sections (themes):		
sections		
Theoretical and methodical foundations of the discipline "Public Health and Healthcare", state policy in the field of public health.	Public health and health care as a science and subject of teaching. Brief history of public health. Legal basis of public health in the Russian Federation. Methods of studying the patterns of the formation of public health and the activities of health services. Health care in foreign countries. International cooperation in the field of health.	
Public health: the concept, study, assessment of indicators and determinants of public health.	Medical demography. Medico-social aspects of demographic processes. Morbidity, disabilityandphysicaldevelopment.	
Fundamentals of medical statistics and organization of medical and social research. Statistical analysis.	Fundamentals of Medical Statistics. Organization (stages) of medical and social research. Statistical methods of processing the results of medical and social research.	
The organization of medical and preventive care for the population and the functioning of the main health subsystems.	Organization of treatment and preventive care for the population. Primary health care. Out-patient assistance to the population. Organization of inpatient medical care. Emergency care. Basic principles of organization of dental care for the population. Sociohygienic importance of the major diseases and the organization of treatment and preventive care with them. Organization of health care for workers in industrial enterprises, construction and transport. Organization of medical care for the rural population. System of maternal and child health protection. Organization of state sanitary and epidemiological surveillance. The organization of sanatorium-and-spa help. Medicinal assistance to the population. Provision of health care facilities with medical equipment and instruments. Quality management of medical care. Examination of temporary and permanent disability. Examination of work capacity in dental practice.	
The problems of health preservation, disease prevention, family health and medical ethics.	The problems of disease prevention and health promotion. Participation of public organizations in the protection of public health. Family as an object of medical and social research and primary health care. Medical ethics and deontology, bioethical problems of medicine.	
Fundamentals of health economics and health insurance. Management of health care and medical personnel.	Fundamentals of health management. Fundamentals of Economics, Planning and Financing of Health. Marketing in health care. Fundamentals of social and health insurance. Training of medical personnel.	

Developers:

Assistant of Public Health and Hygiene, PhD, Associate Professor

E.V. Kaverina

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Discipline	Epidemiology	
Volume of discipline	2 CU (72 hours)	
Summary of discipline:		
Parts (topics) of discipline	Summary of parts (topics) of discipline:	
General epidemiology. Epidemiological method and evidence-based medicine. Epidemiological studies.	Short history of the epidemiology development. Epidemiological method (analysis). Establishing an epidemiological diagnosis. The kinds of epidemiological research.	
Epidemic process. Epidemiological surveillance.	L.V. Gromashevsky's role in the study about the epidemic process – three interconnecting elements: a source of infection, a mechanism of transmission and a susceptible organism. Indicators of the epidemic process. Antiepidemic measures. The basis of preventive measures organization. Levels of prevention. The epidemiological surveillance as a subsystem of the social-hygienic monitoring (SHM).	
The study about natural niduses. Sapronotic infections.	The definitions: "natural nidus", "anthropogenic nidus". The role of wild, semisinanthropic and sinanthropic mammals (rodents, insectivores, ungulates, predators), birds in the formation of natural and anthropogenic nidi. The main principles of epizoological-epidemiological surveillance.	
Disinfection, sterilization.	The definition of disinfection. Types of disinfection: prophylactic and nidal (current and final). Disinfection specificities for respiratory infections, enteric infections and extremely dangerous infections. Presterilization cleaning of medical, including stomatological, things. Control of presterilization cleaning. Sterilization. Control of sterilization quality.	
Immunoprophylaxis of infectious diseases.	Definition of immunoprophylaxis. Theoretical basis of immunoprevention. The schedules of immunoprophylaxis in the world. Active and passive immunoprophylaxis. Postexposure immunoprophylaxis.	
Infectious disease epidemiology. Epidemiology of socially significant infections.	The content of this section is defined by the actual epidemic situation and calendar plan of study course of infectious diseases. Epidemiological characteristics of socially significant infections. Organization of antiepidemic and preventive measures in niduses of infection diseases.	

Epidemiology and prophylaxis of nosocomial infections.	Definition of nosocomial infections. Epidemiological, economic and social significance of hospital infections. Contributors of hospital infection emergence and distribution. Antiepidemic regime in medical institutions. Prevention of nosocomial diseases in medical staff. Post-exposure prevention of HIV, hepatitis viruses (B, C, D).
Epidemiology of emergency situations.	Definition of the "emergency situation". Classification of catastrophes. Basic principles of medical aid and epidemic control organization in the area affected by an emergency.

Developers:

Associate professor of the Department of infectious diseases with courses of epidemiology and phthisiatry

S.L. Voznesenskiy

Head of the Department of infectious diseases with courses of epidemiology and phthisiatry

G.M. Kozhevnikova

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The name of education program	Internal diseases	
Duration of the discipline	7 CU (252 hours.)	
Brief description of the discipline		
Name of the part of the discipline:	Brief contents	
Methods of physical examination of the patient	General condition, consciousness, position, antropometry, skin and mucus layers, lymphatic nodes, muscular system, joints	
Examination of a patient with lung diseases	Main complaints, physical examination (inspection, palpation, percussion, auscultation). Instrumental methods, laboratory methods. Main clinical syndromes. Main diseases (pneumonia, COPD, bronchial asthma)	
Examination of a patient with cardiovascular diseases	Main complaints, physical examination (inspection, palpation, percussion, auscultation). Instrumental methods, laboratory methods. Main clinical syndromes. Main diseases (arterial hypertension, coronary heart disease, heart failure, atherosclerosis, rheumatic fever, valvular heart diseases)	
Examination of a patient with gastrointestinal tract diseases	Main complaints, physical examination (inspection, palpation, percussion, auscultation). Instrumental methods, laboratory methods. Main clinical syndromes. Main diseases (gastritis, ulcer, bowel diseases)	
Examination of a patient with liver diseases	Main complaints, physical examination (inspection, palpation, percussion, auscultation). Instrumental methods, laboratory methods. Main clinical syndromes. Main diseases (hepatitis, cirrhosis, cholecystits, gall stone disease)	
Examination of a patient with kidney diseases	Main complaints, physical examination (inspection, palpation, percussion, auscultation). Instrumental methods, laboratory methods. Main clinical syndromes. Main diseases (pyelonephritis, glomerulonephritis, chronic renal failure, chronic kidney disease, acute kidney injury)	

Examination of a patient with hemopoietic organs diseases	Main complaints, physical examination (inspection, palpation, percussion, auscultation). Instrumental methods, laboratory methods. Main clinical syndromes. Main diseases (anemia,
Examination of a patient with endocrinologic disorders	leukemia) Main complaints, physical examination (inspection, palpation, percussion, auscultation). Instrumental methods, laboratory methods. Main clinical syndromes. Main diseases (thyroid gland diseases, diabetes mellitus)
Methods of physical examination of the patient	General condition, consciousness, position, antropometry, skin and mucus layers, lymphatic nodes, muscular system, joints

Developers:

Assistant of the Department of Internal Medicine Propaedeutics

Avdoshina S.V.

Head of the Department of Internal Medicine Propaedeutics

Kobalava Zh.D.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Clinical pharmacology		
Complexity (labor input) of disci	pline 2 CU (72 hours)		
	Summary of discipline		
Name of sections (subjects) of	discipline Summary of sections (subjects)		
2. Clinical and pharmacological ato rational pharmacotherapy identistry practice and in emersituations. 1. General issues of clinical pharmacological at the control of the control of the control of the clinical pharmacological at the control of the control of the control of the clinical pharmacological at the control of the control	pharmacology. Evidence-based medicine. 1.2. Clinical pharmacokinetics. Drug dosing. 1.3. Clinical pharmacodynamics. 1.4. Drug interactions. 1.5. Adverse drug reactions. 1.6. General principles of drug efficacy and safety assessment. 2.1. Clinical pharmacological approaches to choosing and prescribing antibacterial drugs		

Developers:

Professor of the Department of Pharmacology	
and Clinical Pharmacology	S.B. Fitilev
Associate professor of the Department of Pharmacology	
and Clinical Pharmacology	A.V. Vozzhaev
Associate professor of the Department of Pharmacology	
and Clinical Pharmacology	I.I. Shkrebniova
Head of the Department of Pharmacology and Clinical	
Pharmacology, Professor	S.K. Zyrianov

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

The name of discipline	General surgery	
Volume of discipline	4 CU (144 hours)	
Abstract discipline		
The purposes and tasks of discipline: The summary of discipline:		
1.General surgery issues	Bleeding, blood loss. Blood products and components Blood transfusion complications. Asepsis. Asepsis. Antisepsis. Bleeding. Hemotransfusion. Preoperative and postoperative periods. Operation. Wounds. Burns. Burn disease. Frostbites. Necrosis. Ulcers. Fistulas. Plastic surgery. Principles of surgical oncology. Local anesthesia. Novocaine blocks	
2.Particular issues of surgery	Local and General reaction of the body to infection Surgical sepsis. Principles of treatment of purulent infection Purulent diseases of soft tissues (furuncle, carbuncle, hydradenitis, erysipelas, abscess, phlegmon). Acute inflammation of lymphatic and venous vessels (lymphangitis, lymphadenitis, acute thrombophlebitis). Purulent inflammation of parotid glands and breast (acute parotitis, acute mastitis). Acute paraproctitis. Purulent diseases of fingers and hand. Osteomyelitis. Chest purulent infection (pleural empyema). Peritonitis. Anaerobic infection (clostridial and non-clostridial infection, tetanus). Closed soft-tissue injuries. Fractures and dislocations. Closed craniocerebral injury (concussion, contusion, brain compression). Chest trauma (pneumothorax, hemothorax). Abdominal trauma.	

Developers:

Associate Professor, Department of Surgery, PhD.

A.A. Barkhudarov

Professor Head of the Department of Surgery, MD Professor.

A.E. Klimov

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Atherosclerosis of vessels of the lower extremities. Clinic. Diagnostics. Treatment. Complications. Differential diagnosis of atherosclerosis and obliterating endarteritis of the lower extremities.

9. Thyroid disease. Thyrotoxic goiter. Clinic. Diagnostics. Treatment.

Graves' disease. Clinic. Diagnostics. Treatment. Endemic goiter. Classification, diagnosis. Treatment, prevention. Complications of thyroid surgery.

10. Calculous cholecystitis. Acute cholecystitis. Clinic. Diagnostics. Treatment. Complications of cholecystitis.

Chronic cholecystitis. Clinic. Diagnostics. Treatment. Type of operation.

- 11. Intestinal obstruction. Classification. Clinic. Methods of conservative and surgical treatment. Mechanical and dynamic intestinal obstruction. Classification. Reasons. Views. Clinic. Diagnostics. Treatment.
- 12. Mechanical jaundice. Reasons. Diagnostic method. Treatment.
- 13. Pancreatitis. Acute pancreatitis. Classification. Clinic. Diagnostics. Treatment. Complications.

Chronic pancreatitis. Classification. Clinic. Methods of diagnosis and surgical treatment.

- 14. Peritonitis. Classification. Etiopathogenesis. Clinic. Treatment. Ways to reduce mortality.
- 15. Special research methods. Methods of endoscopic diagnosis of diseases of the digestive system. Modern methods of early diagnosis of tumors of the digestive tract.

X-ray contrast methods for the study of bile ducts.

Developers:

Associate Professor, Department of Surgery, PhD.

A.A. Barkhudarov

Professor Head of the Department of Surgery, MD Professor.

A.E. Klimov

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The name of discipline	Radiodiagnostics
Volume of discipline	3 CU (108 hours.)
Brief contents	of the discipline
The names of parts (topics) of the subject	Brief contents of the subject's parts (topics):
1. X-ray methods of diagnostics	Physical basis for getting a diagnostic image in X-ray examination, methods of X-ray examination (radiography, fluorography, electro-radiography, fluoroscopy, TV fluoroscopy, digital radiography)
2. Ultrasonography	Physical properties of ultrasound, source and receiver of ultrasound, principles of modern ultrasonographic equipment, major methods of ultrasonograpy
3. Basis of radionuclide methods	Principles of radionuclide diagnostics, typical radionuclide diagnostic system, classification of radionuclide examinations, principles of radiopharmaceuticals
4. X-ray computed tomography (CT) and magnetic resonance imaging (MRI)	CT and principles of getting images in CT. Distinctions from conventional tomography, areas of use, indications and contraindications. MRI and principles of getting images in MRI. Indications and contraindications.
5. X-ray methods for facial-jaw area	All methods of internal and external radiography of teeth, classification including general-view radiography, intra-mouth, external radiographs, radiography in oblique contact and tangential projections, indications for each of those methods.
6. Development and anatomy of teeth and jaws in radiography	Three periods of teeth development, X-ray variants and characteristics of each period (degree of mineralization, stages of radices' formation). Reasons of dentition retardation and their detection.
7. Diagnostics of in-born and acquired deformities of facial-jaws region.	Various anomalies of teeth position and development: change of their number, size, shape and structure. X—ray picture and clinical signs in each kind of teeth anomaly, diagnostic value of X-ray methods.
8. X-ray diagnostics of caries, pulpitis, periodontitis, paradentium diseases.	X-ray features of caries depth depending on size and localization. Differential diagnostics of caries in X-ray examination. Algorithm of X-ray examinations in caries. Classification of pulpitis. X-ray examination in pulpitis. Classification od X-ray features of periodontitis (acute apical, chronic with granuloma formation, chronic fibrotic, exacerbation of chronic course).
9. X-ray diagnostics of traumas of the jaws and teeth	Classification of fractures of maxilla, mandibula, cheekbone. X-ray method and other methods in traumas of facial-jaws region.

10. X-ray diagnostics of malignant tumors of the jaws	The main groups of malignant tumors according to histology (cancer, sarcoma) and localization, all methods of diagnostic radiology in tumors of facial-jaw region, indication for and diagnostic value of each method.
11. X-ray diagnostics of benign tumors and cysts of the jaws. The main methods of radiation therapy.	The main groups of odontogenic and non-odontogenic cysts their X-ray features used for differential diagnostics. The main methods of X-ray diagnostics of those cysts. The main groups of benign tumors: odontomas, ameloblasomas, cementomas, myxomas, odontogenic fibroma, osteoclastoma, their X-ray features used for differential diagnostics
12. Diagnostic radiology in salivary glands' diseases	Anatomical features of parotid, submandibular and sublingual salivary glands, classification of their diseases depending on etiology and pathogenesis, characteristic X-ray features of various diseases. Contrast method of X-ray examination, contrast media; indications contraindications and diagnostic value of sialography.
13. Radiation oncology.	Installations for radiotherapy. Topometry. Methods of radiotherapy. Radiotherapy from 1 field and multiple fields. Distant radiotherapy, intra-tissue irradiation.
15. Basic principles of radiotherapy for tumors of facial-jaw region.	Variants of radiotherapy and their use in the diseases of facial-jaw tumors, possible combination of radiotherapy with other methods of treatment.

Developers:

Associate Professor, Chair of Oncology and Roentgen-Radiology Baryshnikov V.L.

Professor, Chair of Oncology and Roentgen-Radiology Parkhomenko R.A.

The Head of the Chair of Oncology and Roentgen-Radiology Khartchenko N.V.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The name of discipline	Life safety	
Volume of discipline	3 CU (108 hours.)	
Abstract discipline		
The purposes and tasks of The summary of discipline:		
discipline:		
Basic concepts of the discipline "life Safety»	Definitions of the basic concepts of the discipline. The importance of life safety in the development of Russia. Components of the study of life safety. Problems and prospects of development of LS	
Theoretical bases of life safety	Characteristic of the system "man – environment". Industrial, urban, domestic, natural environment. Human interaction with the environment. Based on the optimal interaction.	
Risk	Risk assessment. Damage. Concept of risk.	
Natural emergencies and protection of the population from their consequences	Geophysical, geological, meteorological, agro-meteorological, marine, hydrological hazards; wildfires. Characteristics of the damaging factors of the sources of natural emergencies. Characteristic factors of the human environment. The influence of negative factors on human activity. Environmental safety fundamentals. Principles of ensuring the safety of human interaction with the environment.	
Man-made emergencies and protection of the population from their consequences	Man-made hazards and protection against them. Anthropogenic hazards and protection against them. Sources of environmental problems and their impact on humans. Fires, explosions, the threat of explosions; accidents with the release (threat of release) of emergency chemically hazardous substances (poisonous substances); accidents with the release (threat of release) of radioactive substances; accident with emission (threat of emission) of organic hazardous substances. Striking factors of sources of emergency situations of technogenic character. Phases of development of emergency situations.	
Surrounding world. Hazards arising in daily life and safe behaviour	The surrounding world and people, the nature of their interaction. Man as an object and subject of security. Situations arising in the course of human life. Features of the city as a habitat. High-risk areas in the city.	
Life safety management	Organizational bases of management of LS. The legal framework for the management of the quality of the environment. Environmental quality management. Environmental quality regulation.	
Monitoring as a basis of human life safety management	Types of monitoring: environmental, biosphere, social and hygienic. Use of environmental monitoring data in environmental quality management.	
Harmful dependencies and their social consequences	Computer addiction. The effect of alcohol on the human body. Drug and substance abuse. Smoking and its impact on human health.	
The basic principles of legal support BJ for healthcare professionals	Basic principles of legal support of LS. The main legislative acts and regulations to ensure LS population. Legal basis of	

	environmental safety. Legal basis of industrial safety, labor
	protection. Protection of public health and safety. Liability for
	violation of normative-legal acts in the LS of population
First aid to the affected in an emergency	Cardiopulmonary resuscitation, stopping bleeding, transport
	immobilization of the limbs of the victims

Developers:

Senior Lecturer of the Technosphere Safety Department Germanova S.E.

Assistant of the Department of Disaster Medicine Sokov R.S.

Director of the Technosphere Safety Department Plyushchikov V.G.

Head of the Department of Disaster Medicine Sokov S.L.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The name of discipline	Disaster medicine	
Volume of discipline	3 CU (108 hours.)	
_	Abstract discipline	
The purposes and tasks of	d tasks of The summary of discipline:	
discipline:		
Russian service of emergency	Definition, tasks and basic principles of construction and	
situations	functioning of the Unified state system of prevention and	
	liquidation of emergency situations.	
	Organization of the Unified state system of prevention and	
	liquidation of emergency situations: a brief history of All-Russian	
	service of disaster medicine. The main objectives and principle of	
All-Russian service of disaster	construction. Service of medicine of catastrophes that it includes,	
medicine	regular and non-standard formations. Organizational structure of	
	the sanitary-epidemiological service and its work in emergency	
	situations.	
	The tasks and composition of forces and means of Russian	
	service of emergency situations.	
	Forces and means of liquidation of emergency situations Ministry Of Emergency Situations of Russia:	
	The mode of functioning of the Russian service of emergency	
	situations.	
	The main activities of the Russian service of emergency	
	situations on prevention and elimination of consequences of	
	emergency situations.	
	A brief history of the all-Russian service of disaster medicine.	
	Definition, objectives and basic principles of all-Russian service	
	of disaster medicine. Organization of All-Russian service of	
	disaster medicine:	
	Management service of disaster medicine:	
	Disaster medicine service of the Ministry of health of Russia:	
	Objectives and basic principles of sanitary and anti-epidemic	
	support in emergencies. Network of monitoring and laboratory	
	control, Control and protection of food, food raw materials and	
	water.	
	The main methods of psychological protection of the population	
	and rescuers in an emergency. The concept of catastrophe	
	psychiatry. Traumatic and psihoterapiya the factors of emergency	
	situations. Features of development of mental disorders in	
	emergency situations of various character. Distinguishing features of reactive psychosis and of psychogenic.	
	Service of medicine of catastrophes of the Ministry of defence of	
Medical protection	Russia. Forces and means of liquidation of medical and sanitary	
medicai protection	consequences of emergency situations the Ministry of empty	
	message of Russia and the Ministry of Internal Affairs of Russia.	
	message of Russia and the ministry of internal Affairs of Russia.	

Preparation of medical and preventive institution

Definition, principles and measures of medical protection.

Medical remedies and their use.

Medical personal protective equipment.

Medical and psychological protection of the population and rescuers in emergency situations. Content and objectives.

Traumatic factors emergency situatsii. Features of the development of mental disorders in the affected, medical personnel and rescuers in emergency situations of different nature. The main methods of psychological protection of the population and persons involved in its rescue.

Preparation of medical and preventive institution to work in emergency situations.

Measures to improve the sustainability of the functioning of medical institutions in emergency situations.

Measures for prevention and liquidation of consequences of emergency situations in medical health care institutions.

Protection of medical personnel, patients and property.

Organization of work of medical and preventive institution in emergency situations.

Evacuation of medical institutions.

emergency situations.

Medical and evacuation support

Organization of medical and evacuation measures in emergency situations.

Conditions that determine the system of medical and evacuation support.

The essence of the system of medical and evacuation support: Features of medical sorting affected (patients) in emergency situations.

Features of medical evacuation of affected (patients) in emergency situations.

emergency situations. Features of the organization of medical care for children in

Medical examination and rehabilitation of participants in emergency situations. Basic concepts of medical examination and rehabilitation of participants of liquidation of consequences of emergency situations;

Features of health care in the aftermath of chemical emergency situations:

Health care in the aftermath of radiation accidents:

Health care in emergency situations of transport, road transport, explosion and fire hazard:

Features of health care in terrorist acts:

Features of health care in local armed conflicts:

Health care in the aftermath of earthquakes:

Features of health care of the population in the aftermath of natural disasters:

Bases of the organization of sanitary and anti-epidemic provision of the population in emergency situations:

Characteristics of the epidemic focus and measures to eliminate it. Characteristics and classification of medical property.

Basics of organization of medical supply service of disaster medicine and preparation of pharmacy institutions to work in emergency situations.

Accounting of medical equipment and management of provision of medical equipment.

Organization of medical supply in emergency mode.

Health care provision

	Organization of work of the medical supply units of the disaster
	medicine service in high readiness mode.
	Organization of protection of medical equipment in emergency
	situations.
	Tasks of military medicine in the Unified state system of
Military medicine	prevention and elimination of consequences of emergency
	situations in peacetime.
	Medical units of the Ministry of defence of the Russian
	Federation:
	Purpose, tasks, structure and principles of use of medical and
	nursing teams and specialized medical care teams;
	Purpose, objectives, principles of deployment and organization of
	work of medical units of special purpose.

Developers: Head of the Department of Disaster Medicine

Sokov S.L.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The name of discipline	Infections disease, phthisiology	
Volume of discipline	3 CU (108 hours.)	
	Abstract discipline	
The purposes and tasks of discipline:	The summary of discipline:	
General part	Modern state of the problem of infectious diseases. Properties of the causative agents of infectious diseases. Modern methods of laboratory diagnostics of infectious diseases. Principles of treatment of infectious diseases. Tactics of a dentist if infectious disease is suspected in patient.	
Bacterioses	Diphtheria. Etiology. Sources and routes of infection. Pathogenesis. Oral lesions. Outcomes. Differential diagnosis. Laboratory diagnosis. Principles of treatment. Prevention. Sepsis. Pathogenesis basis of prevention, diagnosis and treatment. Odontogenic sepsis, causes, prevention, diagnosis and treatment. Chlamydial infections. The clinic, diagnosis, treatment. Streptococcal infection: acute tonsillitis (angina), erysipelas of face, scarlet fever. Epidemiology. Pathogenesis. Clinic. Laboratory diagnosis. Complications. Principles of treatment. Tetanus. Etiology. Epidemiology. Pathogenesis. Clinical manifestations. Laboratory diagnosis. Treatment. Prevention. Etiology and pathogenesis of tuberculosis. Methods of diagnosis of tuberculosis. Clinical manifestations of tuberculosis. Extra pulmonary tuberculosis (tuberculosis of other organs and systems). Treatment of tuberculosis. Tuberculosis and related diseases. The fight against tuberculosis in the Russian Federation.	
Virus diseases	Influenza, adenovirus infection and other acute viral respiratory disease. Etiology. The source of infection, the ways of distribution. Pathogenesis. The clinical course. Oral complications. Specific rapid diagnosis. Principles of treatment. Prevention. Herpesvirus disease. Classification. Etiology. Sources of infection. Mechanism of infection. Pathogenesis. The persistence of the pathogen. Clinical manifestations. Lesions of the oral mucosa. Complications. Treatment. Immunotherapy. Epstein-Barr viral infection. The clinic, diagnosis, treatment. Mumps infection (epidemical mumps). Etiology. Epidemiology. Pathogenesis. Clinical manifestations. Symptoms lesions of the salivary glands. Complications. Treatment. Prevention.	

Infection caused by the human immunodeficiency virus (HIV) infection. Etiology. Sources and routes of transmission. Pathogenesis. Clinical manifestations at different stages of the disease. Manifestations of HIV infection from the oral mucosa. Laboratory diagnosis. Measures to prevent HIV infections in dental practice patients.

Viral hepatitis with parenteral route of infection. The etiology of hepatitis B, C, D. The mechanism of transmission. Pathogenesis. Clinical course. Complications. Outcomes. Approach to the Patient. Preventing nosocomial infection when working with patients with hepatitis. Prevention.

Enteric viral hepatitis (A, E).

Clinic, diagnostic, treatment.

Measles. Etiology. Epidemiology. Pathogenesis. The main symptoms of measles in different periods of the disease in adults. Complications. Treatment. Preventive measures.

Rubella. Etiology. Epidemiology. Pathogenesis. Clinical symptoms in adults rubella. Laboratory diagnosis. Complications. Principles of treatment. Preventive measures. Rubella in pregnant women.

Diagnosis of tuberculosis.

Etiology of tuberculosis.

Etiopathogenesis.

Tuberculosis in dentist practice.

Taxonomic characteristics of the MBT, its features and basic species qualities. Pathogenesis of tuberculosis. Pathomorphology of tuberculous inflammation. Ways and methods of TB infection. Primary and secondary TB.

Organization of prevention of tuberculosis

Classification of tuberculosis. Clinical manifestations of tuberculosis of the respiratory system. Physical features of pulmonary tuberculosis. Methods of diagnosing tuberculosis. The rules for sputum collection and the frequency of study in a patient with suspected tuberculosis. Methods for identifying the MBT, their diagnostic sensitivity, specificity, disadvantages and advantages. Classification of tuberculosis according to ICD-10. Clinical classification of tuberculosis. Primary tuberculosis (primary tuberculosis complex, tuberculosis of intrathoracic lymph nodes). Secondary tuberculosis (focal, infiltrative, disseminated, caseous pneumonia, tuberculoma, cavernous, fibrous-cavernous, cirrhotic). Tuberculous pleurisy / empyema

Infectious anti-TB control in a medical institution. Oral tuberculosis. Tuberculosis (TB) Precautions for Outpatient Dental Settings

Logistics of health care delivery to tuberculosis patients in the Russian Federation. Regulations of health care for tuberculosis patients in the medical organizations. Antitubercular dispensary. Specific prevention of tuberculosis. Vaccination. Chemoprophylaxis. Social and sanitary prevention of tuberculosis.

Developers:

Department associate professor Department professor Head of Department (HOD) S.L. Voznesenskiy V.N. Zimina G.M. Kozhevnikova

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Course name	Dermatovenereology	
Total labor input	3 Credit Unit (108 hours)	
•	Discipline summary	
Name of the section of	Contents of the section	
discipline		
General dermatology	1. Anatomy, histology, physiology and biochemistry of the skin	
	2. The main pathological processes in the skin.	
	3. Morphology of skin lesions. Hair and nail changes.	
	4. Methods of examination of a dermatological patient.	
	5. Structure features of childrens' skin. Features of the clinical course of	
	dermatosis in childhood. Principles of external therapy of dermatoses in	
	children.	
	6. General principles of diagnostics and treatment of dermatological patients.	
	Methods of external treatment.	
Parasitic skin diseases	1. Scabies. Clinical findings, diagnostics, modern approaches to treatment.	
	Issues of personal and social prevention.	
	2. Pediculosis. Clinical findings, diagnostics, modern approaches to treatment.	
Non-contagious skin diseases	Issues of personal and social prevention. 1. Dermatites and toxicoderma. Classification. Etiology, pathogenesis, clinical	
Non-contagious skin diseases	findings, diagnostics, modern approaches to treatment. Prevention.	
	2.Eczema. Classification. Etiology, pathogenesis, clinical findings,	
	diagnostics, modern approaches to treatment. Prevention.	
	3. Urticaria. Quincke's Edema. Classification, etiology, pathogenesis, clinical	
	picture, diagnostics, modern approaches to treatment. Prevention. Emergency	
	measures in these conditions.	
	4. Psoriasis: classification, etiology, pathogenesis, clinical picture, diagnostics,	
	modern approaches to treatment. Prevention.	
	5. Lichen planus: classification, etiology, pathogenesis, clinical picture,	
	diagnostics, modern approaches to treatment. Prevention.	
	6. Bullous skin diseases. Pemphigus vulgaris: classification, etiology,	
	pathogenesis, clinical picture, diagnosis, modern treatment approaches.	
	Düring's herpetiform dermatitis: classification, etiology, pathogenesis, clinic,	
	diagnostics, modern approaches to treatment.	
	7. Heilites: classification, etiology, pathogenesis, clinical picture, diagnostics,	
	modern approaches to treatment.	
	8. Rossolimo-Melkersson-Rosenthal syndrome: etiology, pathogenesis,	
	clinical picture, diagnostics, modern approaches to treatment.	
Precancerous diseases	1. Precancerous diseases of the lips circumscribed praecancrous hyperkeratosis,	
	verrucous pre-cancer of the lips: etiology, pathogenesis, clinical picture,	
G 189	diagnostics, differential diagnosis, modern approaches to treatment.	
Syphilis	1. Syphilis. The history of the disease. Etiology, pathogenesis. Epidemiology.	
	Classification. Periodization of the disease. Clinical manifestations in all	
	periods. Lesions of the mucous membranes of the oral cavity. Differential	
	diagnosis. modern approaches to diagnostics and treatment. Prevention: public	
	and personal.	

Developers:

Head of Department of Skin and Venereal Diseases,
Professor
Assistant of the department of Skin and Venereal Diseases

Andrey L. Tischenko Alexey L. Savastenko

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of discipline	Neurology
Discipline Volume	3 CU (108 hours)
Discipl	ine Summary
Name of the course unit	Summary of the course unit
Introduction to neurology. Central and peripheral nervous system. Pyramidal system. Extrapyramidal system and cerebellum.	Anatomy and physiology of pyramidal, extrapyramidal system and cerebellum. Examination of the motor system. Signs of upper and lower motor neuron lesion. Extrapyramidal disorders. Examination of cerebellar function and cerebellar disorders.
Sensory system. Examination of the sensory system Syndromes of lesion. Types of sensory abnormalities. Trigeminal sensory system Cranial nerves. Examination and syndromes	Superficial and deep sensory pathways. Examination of deep and superficial sensation. Syndromes of lesion and types of sensory abnormalities. Anatomy, physiology, examination and syndromes of lesion of 1.2.3.4.5.6.8.11 grapial portions.
of lesion of 1,2,3,4,5,6,8,11 CN. Trigeminal system. Cranial autonomic ganglions. Facial nerve. Caudal group of the cranial nerves(9-12), syndromes of lesion.	of lesion of 1,2,3,4,5,6,8,11 cranial nerves. Anatomy, physiology, examination and syndromes of lesion of trigeminal, facial nerves, cranial autonomic ganglions, 9,10,12 cranial nerves. Bulbar and pseudobulbar palsy. Alternating syndromes.
Autonomic nervous system. Main cranial and facial autonomic disorders. Innervation of salivary glands. Higher cortical functions. Limbic system.	Autonomic nervous system. Examination of ANS. Main cranial and facial autonomic disorders. Innervation of salivary glands. Higher cortical functions. Examination of speech, memory, praxis and gnosis. Syndromes of lesion. Anatomy and physiology of limbic system,
Trigeminal and glossopharyngeal neuralgia.Postherpetic trigeminal neuralgia. Glossalgia. Dental plexalgia.	syndromes of lesion. Trigeminal and glossopharyngeal neuralgia. Postherpetic trigeminal neuralgia. Glossalgia (burning mouth syndrome). Dental plexalgia. Etiology, pathogenesis, clinical presentation, diagnosis and management.
Facial myofascial pain syndrome. Ganglionitis. Facial neuropathy. Facial hyperkinesis.	Facial myofascial pain syndrome. Ganglionitis of pterygopalatinum, ciliary, submandibular and otic ganglions. Facial neuropathy. Facial hyperkinesis: hemifacial spasm, blepharospasm, oromandibular dystonia, Meige syndrome
Stroke. Closed Head Injuries.	Ischemic and hemorrhagic stroke. Etiology, pathogenesis, clinical presentation, diagnosis, prehospital stroke care, and management. Closed

	head injuries: etiology, clinical presentation, diagnosis, and management.
Inflammatory disease of central and peripheral nervous system: meningitis, meningoencephalitis, polyneuropathy, neuroAIDS, neurosyphilis, multiple sclerosis.	Meningitis, meningoencephalitis, polyneuropathy, neuroAIDS, neurosyphilis, multiple sclerosis. encephalomyelitis, AIDP. Etiology, clinical presentation, diagnosis, and management.
Syringomyelia, syringobulbia, myasthenia gravis, brain tumors, epilepsy	Syringomyelia, syringobulbia, myasthenia gravis, brain tumors. Etiology, clinical presentation, diagnosis, and management. Epilepsy: etiology, clinical presentation, types of seizures, diagnosis, prehospital care and management.

Developers: Associate professor of department of neurology and neurosurgery

N.I. Garabova

Associate professor of department of neurology and neurosurgery

N.V. Nozdryukhina

Head of department of neurology and neurosurgery

G.E. Chmutin

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Psychiatry and narcology		
The scope of the	2 CU (72 hours)		
discipline			
Title of tonies	The summary of the discipline		
Title of topics	The summary of topics (topics) of the discipline:		
(topics) of the			
discipline			
I. General	Psychiatry: definition, branches of psychiatry, types of psychiatric care. Methods of		
psychiatry	treatment of mental illnesses. Classification of mental illnesses. Disorders of		
	sensations, disorders of sensory synthesis. Perceptual disorders. Classification, clinical manifestations. Disorders of the associative process. Types of delusions according to		
	content. Delusions, classifications. Overvalued ideas. Obsessions, classification.		
	Delusions of persecution. Delusions of greatness. Depressive delusions. Symptoms of		
	emotional (affective) disorders. Symptoms of memory impairment. Asthenic		
	syndrome: symptomatology, stages. Delusional syndromes. The paranoiac syndrome.		
	Hallucinatory-paranoid syndrome. The Kandinsky-Clerambo syndrome. Paraphrenic		
	syndrome. Cotard syndrome. Syndrome of dysmorphophobia-dysmorphomania.		
	Emotional (affective) syndromes. Manic syndrome. Depressive syndrome. Types of		
	depressions. Types of emotional syndromes. Apathic syndrome. Catatonic syndrome.		
	Amnestic syndrome. Korsakov's syndrome. Catatonic-gebefrenic syndrome. Psychoorganic syndrome. Dementia: varieties. Disorders of consciousness.		
	Depersonalization: varieties. Disorders of sensory synthesis. Paraphilias. Phobic		
	syndrome. Types of obsessions.		
II. Psychopathology.	Oligophrenia: definition, classification, methods of treatment and rehabilitation.		
Categories of mental	Mental disorders in neurosyphilis: varieties, methods of diagnosis, treatment and		
disorder.	rehabilitation. Epilepsy: definition, clinical manifestations, methods of diagnosis and		
disorder.	treatment. Paroxysmal disorders in epilepsy: classification. Non-paroxysmal disorders		
	in epilepsy. Mental disorders in the lesions of cerebral vessels: varieties, clinical		
	manifestations, methods of treatment. Mental disorders in cerebral atherosclerosis, clinical manifestations, Mental disorders in hypertensive disease. Presentle		
	(involutional) psychoses. Alzheimer's disease. Mental disorders in atrophic diseases of		
	the brain. Alcoholism. Addiction. Substance abuse. Mental disorders in infectious		
	diseases. Mental disorders in AIDS. Mental disorders in somatic diseases.		
	Psychosomatics: definition. Varieties of psychosomatic pathology. Mental disorders in		
	craniocerebral trauma. Schizophrenia: definition, the main symptoms and syndromes		
	of mental disorders in schizophrenia. Bipolar affective disorder. Psychogenic		
	disorders. Reactive psychosis. Neuroses. Post-traumatic stress disorder: definition,		
	clinical manifestations, methods of treatment. Personality disorders (psychopathy).		
III. Treatment of	Anorexia nervosa and bulimia nervosa. Methods of treatment of mental illnesses. Psychotropic drugs: definition,		
111. I reaument of	classification. Psychotherapy: definition, basic methods of psychotherapy.		
mental disorders	Neuroleptics: definition, classification, spectrum of psychotropic action of		
	neuroleptics. Varieties of psychomotor agitation. Methods of arresting psychomotor		
	agitation. Tranquilizers. Definition, classification, spectrum of psychotropic effects,		
	side effects. Antidepressants: Definition, classification. Complications and side effects		
	in the treatment of antidepressants. Nootropics: definition, Mechanism of action,		
	indications and adverse effects of basic nootropic drugs, side effects of nootropics.		
	Psychostimulants, normotimics: Mechanism of action, indications and adverse effects and complications. Anticonvulsants. Epileptic status: definition, clinical		
	manifestations, basic methods of treatment. Treatment of epilepsy: principles, basic		
	mannestations, basic methods of treatment. Treatment of epitepsy, principles, basic		

	anticonvulsants. Basic principles of treatment and rehabilitation of patients with	
	schizophrenia. Basic principles of treatment and rehabilitation of patients with	
	affective psychoses. Basic principles and stages of treatment of patients with chronic	
	alcoholism. Treatment of patients with neuroses. Basic psychotropic drugs, methods	
	of psychotherapy. Treatment of patients with anorexia nervosa and bulimia nervosa.	
	Treatment of post-traumatic stress disorders. Diagnosis, types of treatment and	
	rehabilitation of patients with mental disorders due to craniocerebral trauma.	
4.Medlcal	Tasks and goals of the work of a medical psychologist in the clinic of internal	
Psychology	diseases, in a psychiatric clinic. Methods of pathopsychological study. Methods and	
1 Sychology	types of psychological psychotherapy. Abnormalities in mental activity in organic	
	diseases of the brain. Disorders of memory in organic diseases of the brain. Features	
	of impairment thinking in schizophrenia. Features of the emotional sphere and	
	thinking in personality disorders. Features of the work of a psychologist with	
	oncological patients. Features of mental performance in patients with eating disorders.	
	Features of thinking, emotions and memory in patients with epilepsy. Technique of	
	memorizing 10 words. Method "Pictogram". Methodology "Classification of objects".	
	Features and objectives of using psychometric scales in the clinic of internal diseases	
	and psychiatric clinic. Methodology of "Exception of excess"	

Developers:

Professors of the Department of Psychiatry and Medical Psychology

M.S. Artemyeva

Associate professors of the Department of Psychiatry and Medical Psychology

R.A. Suleymanov

Head of the Department of Psychiatry and Medical Psychology

I.V. Belokrylov

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of the discipline	Otorhinolaryngology	
The volume of the discipline	2 CU (72 hours)	
The aim of the discipline:		
The name of the sections of the discipline:	Course description:	
1. Investigation methods of ENT organs: anterior	1. Development of methods of ENT – organs:	
rhinoscopy, posterior rhinoscopy, pharyngoscope,	anterior rhinoscopy, posterior rhinoscopy,	
laryngoscopy, otoscopy.	pharyngoscope, laryngoscopy, otoscopy.	
2. Pathology of the nose and paranasal sinuses.	2. Diseases of external nose.	
	Acute and chronic diseases of the nasal cavity.	
	Injuries of the nose and paranasal sinuses.	
	Nosebleeds. Foreign body in the nasal cavity and	
	paranasal sinuses. Endonasaal endoscopic surgery.	
	Inflammatory diseases of the paranasal sinuses.	
	Orbital and intracranial complications of diseases	
	of the nose and paranasal sinuses.	
3. Pathology of the pharynx.	3. Angina, complications of angina.	
	Chronic tonsillitis. Trauma and foreign body in	
	the pharynx. Adenoids. Acute and chronic	
	pharyngitis.	
4. Pathology of the ear.	4. Diseases of the external ear. Acute middle ear	
	infections. Mastoiditis.	
	Physiology and research methods of the vestibular	
	analyzer.	
	Chronic diseases of the middle ear. Intracranial	
	complications. Diseases of the inner ear.	
5. Pathology of the larynx.	5. Diseases of the larynx. Stenosis of the larynx.	
	Tracheotomy.	
6. Tumors of the ear and upper respiratory tract.	6. Tumors of the ear and upper respiratory tract.	

Developers:

Assistant Professor of otorhinolaryngology

I.A. Korshunova

Head of Department of otorhinolaryngology

V.I. Popadyuk

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Ophthalmology	
•	2 CU (72h)	
Discipline summary		
Name of the discipline section	Content of the section	
Anatomy of the organ of vision. Investigative methods.	 1.1. Three departments of the visual analyzer. Anatomy of the orbit. 1.2. Protective apparatus of the eye. Conjunctiva. 1.3. Tear-producing and teardrop apparatus of the eye. 1.4. Layers of the eyeball. Vitreous body. 1.5. Investigation of the eye and its appendages in side light and transmitted light. Basics of ophthalmoscopy. 1.6. Central and peripheral vision. 1.7. Change of view fields. 1.8. Color perception. Disorders of color perception. 	
Visual acuity. Refraction. Accommodation. Binocular vision. Strabismus.	 2.1 Optical system of the organ of vision. 2.2.Visual acuity. 2.3 Physical and clinical refraction. 2.4 Accommodation and convergence. 2.5 Refractive anomalies. Correction. 2.6 Astigmatism, its types, principles of correction. 2.7 Presbyopia, principles of correction. 2.8 Binocular vision. Violation of binocular vision. 2.9 Strabismus, its types. Causes. Types of treatment of strabismus. 	
Inflammatory eye diseases (conjunctivitis, keratitis, scleritis, uveitis).	 3.1 Acute infectious conjunctivitis. Classification. Treatment. Chronic conjunctivitis. Classification. Treatment. Allergic conjunctivitis. Classification. Treatment. 3.2 General symptoms of corneal disease. Exogenous keratitis. Endogenous keratitis. Etiology, clinical picture, treatment. Corneal ulcer. Etiology, clinical picture, treatment. Outcomes of keratitis. Types of treatment of keratitis, their consequences. 3.3 Sclerites. Clinical picture, treatment. 3.4 Irit. Iridocyclitis. Clinical picture, diagnosis, treatment. Chorioretinitis. Clinical picture, diagnosis, treatment. 	
Cataract. Glaucoma.	4.1 Definition of glaucoma. Normal and elevated IOP. Etiology, pathogenesis and classification of glaucoma. Acute attack of glaucoma. Features of clinical picture. Treatment. Methods of treatment of glaucoma. 4.2 Definition of cataract. Classification of cataracts. Communication of cataracts with common diseases. Modern principles of cataract treatment.	

Diseases of the retina and optic	5.1 Retinites. Changes of the retina in general diseases.
nerve. Trauma.	Clinical picture. Treatment. Degenerative changes in the
	retina. Clinical picture. Treatment.
	5.2 Inflammatory and non-inflammatory diseases of the
	optic nerve. Features of the clinical picture. Treatment.
	5.3 Causes and Classification of Eye Trauma. Damage to
	the eyelids.
	Blunt trauma of the eyeball. Injury of the orbit. Diagnostics.
	Treatment. Burns of the eyes. Classification. Methods of
	treatment.
	5.4. Organization of eye care for the population. Disability
	by sight.
Diseases of the eyes in countries with	6.1 Etiology of trachoma, stage of disease. Complications
hot climates.	and consequences of trachoma. Differential diagnostics.
	Prevention and treatment of trachoma.
	6.2 Features of ocular pathology in countries with tropical
	climates. Classification of eye diseases in tropical countries.
	Ophthalmic helminthiases (main types).
	6.3 Ophthalmomiasis. Treatment, prevention.
	6.4 Changing eyes in general diseases. Treatment.
	6.5 Lesion of the eye in avitaminosis. The defeat of the
	organ of vision by the poisons of animals and plants.

Developers: Head of the Department of Eye Diseases, prof. M.A. Frolov

Associate professor A.M. Frolov

Assistant of the department K.A. Kazakova

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The name of the discipline	Forensic medicine
The workload of the discipline	2 CU (72 hours)
	ne summary of the discipline
The name of the discipline	The contents of the section
Procedural and organizational issues of forensic medical expertise. Examination of the scene and the corpse at the place of its discovery. Forensic medical thanatology (General and particular).	1. The structure of the forensic medical service in the Russian Federation, the legal regulation of forensic medical examination, the limits of its competence. 2. The objects of forensic medical examination, methods of their expert examination, the capabilities of the diagnostic. 3. The rights and the obligations of the expert and the expert in the field of medicine while performing primary investigation (examination of the scene). 4. Investigative examination. The order of examination of the scene (the corpse at the place of its discovery), procedural and organizational forms of participation of the doctor in it, especially taking into account the category, kind and type of death. Medical and legal aspects of the statement of death, the establishment of the fact of death. Early and late post-mortem changes.
Forensic medical examination of the corpse (sectional study of the corpse). Forensic medical examination in case of sudden death.	1. The reasons for forensic medical examination (research) of the cadaver. Documentation of forensic medical examination. Principles of construction of forensic medical diagnosis and conclusions (conclusion) at forensic medical examination (research) of a corpse. Execution of medical death certificate (ICD). 2. Forensic medical examination in case of sudden death.
General issues of forensic traumatology (thanatogenesis of in case of various types of trauma), trauma with blunt solid objects, falling from the height, transport injury. Features of damage to the maxillofacial area in case of various types of trauma Laboratory research methods in	The study of injuries (bruises, abrasions, wounds, fractures, etc.). Mechanisms of their formation, morphological properties and distinctive features of the damage. Transport injury and death from extreme external factors. Features of thanatogenesis at various types of external influence. Forensic medical examination of material evidence of biological
forensic medicine. Identification of the person by dental status and related issues.	origin (blood, sperm, saliva, hair). The establishment of gender and age by teeth
Forensic medical examination of injuries by sharp objects and gunshot injuries	Mechanisms of the formation, morphological and distinctive features of the damage. Features of the injuries of the maxillofacial area in case of these types of trauma.

Forensic medical examination of the victims of the accused and others. Examination of general and professional disability.

Forensic medical examination of professional violations of healthcare professionals.

- 1. Requirements for execution of medical documentation, description of the injuries detected in the patient.
- 2. Professional violations of healthcare prosessionals and responsibility for them. Iatrogenia, accident in medical practice, defective and improper medical care, medical error, etc.

Developers:

Assistant lecturer of the Department of Forensic medicine

Asiya R. Bashhirova

The head of the Department of Forensic medicine

Dmitriy V. Sundukov

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The name of the discipline	Obstetrics	
The workload of the discipline	3 CU (108 hours)	
The summary of the discipline		
The name of the discipline	The contents of the section	
Medical care in female consultation and obstetric hospital.	The concept of "female consultation". Tasks, functions and structure of the female consultation". The concept of "obstetric hospital". Levels of rendering obstetric Objectives, functions and structure of "obstetric hospital". Levels of rendering obstetric care in the Russian Federation.	
Normal menstrual cycle and its regulation. Family planning. Birth control.	The concept of "normal menstrual cycle" (NMC). Levels of regulation of the NMC. The concept of "family planning, "a board", "contraception". The tasks of the family planning institute. To lassification of abortion, indications, methods. By lassification of contraceptive methods.	
Birth canal. Fetus from an obstetric point of view.	The structure of the bone pelvis. My shots and fascia pelvic floor. The plane of the pelvis. The concepts of "full-term" and "mature" fruit. The dimensions of the head and body of the fetus. Obstetric terminology: h location, position, position, type and presentation of the fetus.	
Obstetric Studies Determining the duration of pregnancy and the date of delivery	Pelviometry. The concept of "true conjugate. "Methods for determining the true conjugate. Amniocentesis, chorionic biopsy and cordocentesis - definitions. The gold standard for diagnosing pregnancy. Reliable signs of pregnancy. Negele's rule and its modifications.	
Mechanisms of labor in front and rear views of the occipital presentation.	The concept of "mechanism of birth. "Fetal movements. The concept I "point of support" and "fixation point". The concepts of "right inner turn" and "wrong inner turn."	
Clinic and management of labor. Physiology of the postpartum period. Pelvic presentation of the fetus. Mechanism and management of labor.	The concepts of "childbirth", "contractions", "attempts." Causes of onset of labour. Periods of labour, their course, duration. The concept of "afterbirth." Determination of physiological blood loss in childbirth. The first toilet of the newborn. The duration of the postpartum period. Modern perinatal technology. The concept of "pelvic presentation" (TP). TP classification, risk factors, TP diagnosis. Features of labor in the TP.	
Multiple pregnancy	The concept of "multiple pregnancy" (MP). Risk factors, classification, diagnosis, complications of MP. Optimal timing and methods of delivery in patients with MP.	

Pre-eclampsia	The concept of "pre-eclampsia" (PE). Risk factors,
	classification, pathogenesis, clinic, diagnosis, treatment and
	prevention of PE.

Developers:

Associate Professor at the Department of Obstetrics and Gynecology with a course of perinatology

Lebedeva M.G.

Head of the Department of Obstetrics and Gynecology with a course of perinatology

Radzinsky V.E.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Subject name	Pediatry
Volume of discipline	3 credits (108 Hours)
Course d	lescription
Title of the unit	Unit's content
Children and adolescent health protection Periods of childhood Childhood infectious diseases The main somatic disorders in children of different ages	The organization of medical and preventive care for children. Essentials of the organization of the children's hospital and specialized pediatric care. Periods of childhood. Pediatric nutrition children. Physical and sexual development. Age-related morphological and functional features of organs and systems. Introduction to perinatology. Physiology and pathology of the newborn. Border conditions of newborns. Principles of rational feeding of newborns. Jaundice of newborns. Birth injury. Perinatal lesions of the nervous system. Diseases of the upper respiratory tract. Lower respiratory tract infections: acute bronchitis, bronchiolitis, pneumonia. Chronic lung disease in children. Bronchial asthma. Diseases of the circulatory system. Congenital heart defects. Myocardial diseases. Myocarditis. Cardiomyopathy. Rheumatic fever. Diffuse connective tissue diseases: systemic lupus erythematosus, juvenile rheumatoid arthritis, juvenile dermatomyositis, systemic scleroderma. Systemic vasculitis. Hematopoietic diseases, hemorrhagic and thrombotic diseases. Diseases of the digestive system. Diseases of the digestive system. Diseases of the urinary system. Infectious diseases. Infectious exanthema. Bacterial meningitis and meningoencephalitis. Herpesvirus infections. Acute intestinal infections. Malaria, HIV infection, tuberculosis, hemorrhagic fevers.

Developers:

Professor of the Department of Pediatrics Associate Professor, Department of Pediatrics Head of the Department of Pediatrics Head of Program Kuzmenko L.G. Illarionova T.Yu. Ovsyannikov D.Yu. Daurova F.Yu.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

The name of the discipline	Physical Culture and sports	
The amount of discipline	2 CU (72 hours)	
Course Description		
Topics	Content of topics	
Practical section	Topic 1. Athletics. Topic 2. Basketball. Topic 3. Badminton. Topic 4. Skiing. Topic 5. Volleyball. Topic 6. Football.	

Developers:

Professor of the Department of Physical

Education and Sport Pushkin V.N.

Associate Professor of the Department of Physical

Education and Sport Razmakhova S.Yu.

Associate Professor of the Department of Physical

Education and Sport Shulyatev V.M.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of the discipline	Prevention and communal dentistry	
volume discipline	7 CU (252 hr.)	
Summary disciplines		
The section titles (the) discipline Summary of sections (so) discipline:		
Basics of sanitary and anti-epidemic regime	The main provisions of sanitation and hygiene. System of	
in dentistry. Providing first emergency	medical care in the Russian Federation. Principles of	
dentist in ambulatory conditions of	organization of dental care, conducting medical examination	
reception.	of patients with dental disease. Etiology, pathogenesis, clinical	
Diagnostic methods used in dentistry.	manifestations and diagnosis of major dental diseases. General	
Examination of dental patient.	and local factors that cause disease of the teeth and oral	
Epidemiology of dental diseases. The	cavity, preventive measures aimed at preventing the	
prevalence and intensity of dental diseases.	occurrence of major dental diseases.	
	Methods and caries prophylaxis of teeth, its complications,	
	diseases of the hard tissues of origin of non-carious teeth.	
Prevention of congenital anomalies of the	Methods and means of preventing periodontal diseases.	
maxillofacial region. Activities aimed at the	Methods and tools for dental education, its goals, objectives,	
preservation and promotion of health and	means and modalities of. Fundamentals of dental	
includes the formation of a healthy lifestyle.	epidemiological survey of the population (goals, objectives,	
Organization of protection of the population	milestones, methods of registration of results). Legal aspects	
in the outbreak of especially dangerous	of the work. The structure of tissues, organs and systems in	
infections, worsening of the radiation	relation to their function. Anatomic - physiological	
situation, natural disasters and other	characteristics of the maxillofacial region in normal and	
emergency situations.	pathological conditions. Fundamentals of types and methods	
Clinical examination, as a method for	of disinfection and sterilization. The epidemiological	
monitoring the health of the population.	situation, the basic properties of the pathogen, transmission	
	routes, risk groups, the main clinical manifestations, methods	
	of diagnosis, prevention and treatment of HIV infection,	
	hepatitis A. Organization of work, equipment, tools,	
	medicines, therapeutic, surgical, orthopedic offices and	
	surgeries, dental health facilities. Modern filling materials. To	
	be able to give the sanitary and hygienic assessment of	
	environmental factors. Dental terminology.	

Developers:

Head of the Department of General and Clinical Dentistry, professor Assistant of the Department of General and Clinical Dentistry

A.M. Avanesov

E.N. Gvozdikova

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Propedeutics of dental diseases	
Volume of the discipline	7 CU (252 hours)	
	Short contents of the discipline	
Names of the sections of the sections (topics) the discipline of the discipline		
Propedeutics of therapeutic dentistry	Organization of dental care. Dental unit types and principles of operation. The types of dental handpieces. Safety and personal protection of the doctor and the patient. Asepsis and antisepsis. Ethics. Deontology. Examination of the patient in the practice of a dentist. Tools for examination of dental patient. Basic and advanced methods of examination. Ergonomics. Basic concepts about the work of "four hands". The anatomy of the tooth. Medical history filling. Caries, definition and classification. The stages of treatment of dental caries. Isolation of operating field: a cofferdam. Principles and stages of preparation of carious cavities. Tools. Features of preparation of carious cavities I - V classes by Black and VI class. Filling materials. Classification. Composites, light and chemical curing, the technique of using. Amalgam. Cements. GIC. Features of restoration of different groups of teeth utilizing filling material: using the matrix system, wedges, dividing plates; creating a point of contact and its effect on the periodontium. Possible errors and complications of preparation and filling. The concept of endodontium, the periodontium, the parodontium. The pulp of the tooth, value. Anatomo-topographical features of structure of cavity of teeth of upper and lower jaw. Indications for endodontic treatment. Methods of treatment of pulpitis. Devitilizing (necrotizing) agents, their purpose and use. Endodontic instrumentation, purpose, standardization. Classification. Methods of determining the length of the root canal. A standardized technique of root canal preparation, medications for the treatment of root canals. Instrumental and medicamental processing of root canals. Methods "step-back" and "crown-down". The technique of passing hardly passable channels by a method of balanced forces. Materials used for root canal filling. Classification, indications for use. Techniques of root canal by lateral condensation technique using gutta-percha cones. Termofill. Errors during endodontic treatment. Methods for their	

Propedeutics of prosthetic dentistry

Biomechanics of the mandible movements. Articulation, occlusion, types of occlusion. Definition of Central occlusion symptoms. Defects in the coronal part of the tooth and the restoration crown orthopedic methods IDOST. Indications for the use of inlays. Features of tooth preparation under the inlay. Methods of manufacture of the inlays (direct, indirect). Kinds of artificial crowns, indications to application. Requirements for artificial crowns. Features of tooth preparation for stamped crown, instruments. Clinical and laboratory stages of manufacture of stamped crowns. Indications for treatment of defects of dentition, the materials used for this purpose. Features of teeth preparation in the manufacture of soldered bridge prosthesis. Clinical and laboratory stages of manufacture. Indications and contraindications to orthopedic treatment of defects of tooth crown with casted, metal-ceramic, metal-plastic fixed structures. The materials used for their production, physico-chemical properties. Features of preparation of teeth for casted crowns. Retraction of the gums and its types. Abrasive tools for preparation in the manufacture of crowns. The concept of "the step", its purpose, types. Clinical and laboratory stages of manufacturing of crowns. Casted crowns with layers of plastic. The requirements for such frame structures and layering material, their physico-chemical properties. Technological features in the manufacture of plastic dental prostheses. The method of production of temporary (substitute) crowns. Features of preparation of teeth under metal-ceramic crown. Clinical and laboratory stages of manufacturing of metal structures. Two-layer impression (impression) its purpose, materials for the imprint. Manufacturer of combined models, materials, methods. Custom casted posts, indications for their use. Clinical and laboratory stages of manufacture. Errors and complications on the clinical and laboratory stages.

Propedeutics of surcical dentistry

Indications and contraindications for operation of tooth extraction. The position of the doctor and the patient during removal of teeth in the upper and lower jaw. The structural features of the forceps. Methodology and characteristics of removal of teeth and roots of teeth on upper and lower jaw. General and local complications during and after tooth extraction. Anatomo - topographical features of structure and innervation of the upper and lower jaw. Types of local anesthesia, anesthetics. Indications, technique of realization. Anesthesia. The concept of intraligamentary and intraseptal anesthesia. Methods and technique of application, infiltration and block anesthesia for the upper and lower jaw. General and local complications of local anesthesia.

Developers:

Head of the department of dental propedeutics

S.N. Razumova

Senior professor of the department of dental propedeutics

A.S. Manvelyan

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Cariesology and hard tissues diseases
The amount of discipline	8 Credits (288 hours)
Discipline	summary
Name of sections (topics) of the discipline	Summary of sections (topics) of the discipline:
Organization and equipment of dental office. Ergonomics. Ethics and deontology in dentistry. Examination of the dental patient Medical record.	Standards and requirements for the organization of the dental office. The basic principles of asepsis in therapeutic dentistry. Methods of examination of the dental patient: basic, additional.
Etiology, pathogenesis of dental caries.	Dental caries. Definition. Etiology. Theory of caries. Pathogenesis. Classification of caries, including ICD – 10.
The role of oral fluid and dental deposits in the pathogenesis of caries.	Tooth decay of enamel, dentine and cement. Diagnosis, treatment and prevention of dental caries. Errors and complications in the diagnosis
Clinic, diagnosis of dental caries. Methods of treatment of dental caries, using various techniques of preparation, the choice of filling material. Non-carious lesions of the teeth that occur before teething.	and treatment of dental caries. Etiology, pathogenesis. Clinic, diagnosis, treatment. Methods of treatment of non-carious lesions of hard tissues of teeth, using different techniques of preparation, the choice of filling
	material. Prevention.
Non-carious lesions of the teeth that occur after teething.	Etiology, pathogenesis. Clinic, diagnosis.
Teeth whitening. Restoration of teeth. Errors and complications in the diagnosis and treatment of diseases of hard tissues of teeth.	Methods of treatment of non-carious lesions of hard tissues of teeth, using different techniques of preparation, the choice of filling material. Prevention. Methods of individual and professional teeth whitening. Stages of aesthetic restoration. Detection, elimination and prevention of errors and complications in the diagnosis and treatment of diseases of hard tissues of teeth.

Developers:

Professor of conservative dentistry department

F.Yu. Daurova

Associate Professor of Conservative Dentistry department

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Endodontics
The amount of discipline	6 Credits (216 hours)
Discipline summary	
Name of sections (topics) of the discipline	Summary of sections (topics) of the discipline:
Inflammation of the tooth pulp. Pulpitis is acute and chronic.	Structure and functions of the pulp. Etiology, pathogenesis of inflammation of the tooth pulp. Classification of pulp diseases - ICD – 10. Clinic, diagnosis, differential diagnosis of acute and chronic pulpitis.
Methods of treatment of pulpitis	Biological method vital amputation. Indications and contraindications. Methods of treatment of pulpitis that do not preserve the viability of the pulp: devital pulp extirpation, vital extirpation of pulp. Indications. Endodontic instruments. Methods of processing and sealing of the root canal.
Inflammation of the apical periodontium.	Anatomical and physiological features of the periodontium. Etiology, pathogenesis of apical
Apical periodontitis is acute and chronic.	periodontitis. Classification of periodontitis MKB-10. Clinic, diagnosis, differential diagnosis of acute and chronic apical periodontitis.
Methods of treatment of periodontitis by visits.	Means and methods of endodontic treatment. Conservative surgical methods in endodontics. Complications and errors in endodontics, whitening of devital teeth.
Somatogenic the source of infection, focal diseases	Odontogenic sepsis.

Developers:

Professor of conservative dentistry department

F.Yu. Daurova

Associate Professor of Conservative Dentistry department

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Geriatric dentistry and mucosal diseases	
The amount of discipline	6 Credits (216 hours)	
Discipline summary		
Name of sections (topics) of the discipline	Summary of sections (topics) of the discipline:	
Examination of the patient with diseases of the oral mucosa.	The structure of the oral mucosa. Elements of the defeat of the oral mucosa. Classification of diseases of the oral mucosa. Damage due to	
Differential diagnosis. Preparation of a survey plan and a comprehensive treatment plan.	mechanical, chemical and physical effects. Clinic, diagnosis, treatment. Manifestation of leukoplakia in the oral cavity. Etiology, pathogenesis, diagnosis, treatment. Herpes zoster. Etiology,	
Traumatic lesions of the oral mucosa. Leukoplakia.	pathogenesis, diagnosis, treatment. Quincke Edema. Drug allergy. Erythema multiforme exudative. Aphthous stomatitis. Etiology, pathogenesis, diagnosis, treatment. Oral lichen	
Infectious diseases of the oral mucosa. Allergic diseases of the oral mucosa. Changes in the oral mucosa in dermatoses.	planus, pemphigus vulgaris, lupus erythematosus. Classification, clinic, diagnosis and treatment.	
Diseases of the tongue. Diseases of lips.	Anomalies and diseases of the tongue; folded, diamond-shaped tongue. Glossalgia. Somalia. Exfoliative, allergic, glandular, eczematous cheilitis. Etiology, pathogenesis, clinic, diagnosis, treatment. Classification. Clinical picture,	
Precancerous diseases of the red border of the lips and oral mucosa. The condition of the oral cavity in elderly people. Features of treatment methods. Prevention of diseases of the oral mucosa.	diagnosis, treatment, prevention. The condition of hard tissues of teeth, periodontal and oral mucosa in the elderly is normal and pathological. Features of dental examination and treatment of the elderly.	

Developers:

Professor of conservative dentistry department

F.Yu. Daurova

Associate Professor of Conservative Dentistry department

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of discipline	Periodontology	
The amount of discipline	7 Credits (252 hours)	
Discipline summary		
Name of sections (topics) of the discipline	Summary of sections (topics) of the discipline:	
The structure of the periodontium. Etiology and pathogenesis of periodontal disease. Classification of periodontal diseases.	The concept of periodontal complex. Modern view on the etiology and pathogenesis of periodontal disease.	
The prevalence of periodontal disease. Examination of a patient with periodontal disease.	Classifications. Features of examination of patients with periodontal disease Methods of index evaluation.	
Methods of diagnosis of periodontal disease.	Basic and additional research methods.	
Gingivitis.	Gingivitis acute and chronic, hyperplastic, ulcerative. Clinic, diagnosis, treatment, prevention.	
Periodontitis.	Periodontitis. Clinic, diagnosis, treatment, prevention. Periodontosis. Clinic, diagnosis, treatment,	
Periodontosis.	prevention.	
Periodontolisis.	Clinic, diagnosis, treatment.	
Periodontal disease.		

The structure of the periodontium.

Etiology and pathogenesis of periodontal disease.

Features of periodontal disease course in patients with General somatic pathology. Non-surgical treatments

Surgical treatments The concept of complex treatment of periodontal diseases (non-surgical, surgical, orthopedic).

Prevention of periodontal disease.

The influence of somatic diseases on the inflammatory process in the periodontium. Features of treatment and prevention.

Professional oral hygiene, local anti-inflammatory therapy.

Open curettage, periodontal pockets, flap surgery, gingivectomy, mucogingival surgery. Treatment of the patient is individual and complex:

General and local; conservative and surgical, including orthopedic treatment - splinting of mobile teeth and selective grinding of teeth.

Maintenance therapy. Dispensary observation.

Developers:

Professor of conservative dentistry department

F.Yu. Daurova

Associate Professor of Conservative Dentistry department

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Discipline title	Local anesthesia and anesthesiology in dentistry
The amount of the discipline	2 CU(72 hours)
Content o	f the discipline
Titles of the discipline subjects	subjects content
1. Organization of surgical cabinet 2. General anesthesia 3. Local anesthesia 4. Operation of tooth extraction	1.Organization of surgical department (cabinet) of dental clinic. Aseptic and antiseptic conditions during operations in facial and oral regions. AIDES and B hepatitis prophylaxis. Examination of patients in surgical department (cabinet) of dental clinic. Deontology and medical ethics. 2.General anesthesia. Basics of reanimation care. Reasons for general anesthesia in operation in facial and oral regions. Types of general anesthesia. Complications of general anesthesia. 3. Premedication. Choice of anesthesia and patient's preparation for operations in cases of additional pathology and aging. Local anesthetics and other drugs used in cases of local anesthesia. Types of local anesthesia. Potentioned local anesthesia. Anesthesia in operations on maxilla. Anesthesia in operations on mandible. 4. Specifics of operations in facial and oral regions. Methods of tooth and radix extraction on

Developers:

Associate Professor, Department of Maxillofacial Surgery Zandelov V.L.

Head of the Department of Maxillofacial Surgery Ivanov S.Yu.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Discipline title	Oral surgery
The amount of the discipline	5 CU (180 hours)
Content of	the discipline
Titles of the discipline subjects	subjects content
1. Periodontitis	1.Etiology and pathogenesis of odontogenic
2. Periostitis, Osteomyelitis	inflammatory oral pathology. Classifications of
3. Pathology of tooth eruption	inflammatory pathology of maxilla-facial region.
4. Odontogenic sinusitis	Immune and biological specifics of maxilla-facial
5. Lymphoadenitis	region tissues. Influence of antibiotics resistence
6. Non-odontogenic inflammatory processes of	of oral tissues on the progress of odontogenic
maxilla-facial region	infection. Ways of spreading for odontogenic
	infections. Reasons of recurrence of chronic
	odontogenic infections. Periodontitis.
	Classification. Pathologycal anatomy. Acute and
	chronic periodontitis. Surgical methods of
	treatment of chronic periodontitis.
	2. Acute odontogenic peristotis. Pathological
	anatomy. Clinics, diagnostics, differential
	diagnostics, treatment. Odontogenic osteomyelitis.
	Classification, etiology. Modern theory of
	pathogenesis and pathological anatomy. Acute
	stage of osteomyelitis.
	3. Pathology of tooth eruption. Etiology, clinics,
	diagnostics and treatment. Complicated eruption
	of the third low molar.

Developers:

Associate Professor, Department of Maxillofacial Surgery

Zandelov V.L.

Head of the Department of Maxillofacial Surgery

Ivanov S.Yu.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Gnathology and temporo-mandibular joint's functional diagnostics
Scope of the discipline	2 credit units (72 hours)
· ·	of the discipline
Titles of parts (topics) of discipline	Titles of parts (topics) of discipline
1. Basics of clinical gnathology (biomechanics of the dental system. Functional analysis of the dental system	Basics of Clinical Gnathology. Morphofunctional elements of the temporomandibular joint. Biomechanics of the masticatory system. Articulators and occluders, facebow. Methods for installing models into the articulator and adjusting it to an individual patient function. Techniques of determining and registering a central occlusion and the central ratio of the jaws. Methods of recording angle of the transversal articular path ("Gothic angle"). Computer methods of axiography and functionography. Costen's syndrome. Methods for determining and recording the height of the lower part of the face. Basics of occlusive diagnosis. "Occlusion Factors". Clinical, laboratory and hardware methods for diagnosing occlusal relationships of the dentitions.
2. The functional status and diagnosis of dentition with defects of teeth and dentition, periodontal disease.	The functional state of the dentofacial systems in case of pathology of hard dental tissues. Methods for determining the speech function. The functional state of the dentofacial systems in the partial absence of teeth. Methods of determining chewing function. The functional state of the dentofacial systems in periodontal diseases. Methods for determining the functional state of periodontal (Periotestometry).
3. Diagnosis and orthopedic treatment of patients with pathology of the temporomandibular joint and masticatory muscles	Etiology, pathogenesis, classification, clinical manifestations of diseases of the temporomandibular joint and masticatory muscles. Modern diagnostic methods. Clinical, laboratory and hardware methods for diagnosing occlusion of interconnections of dentitions. Differential diagnosis.

4. Diagnosis and orthopedic treatment of patients with pathology of the temporomandibular joint and masticatory muscles

The basic principles of complex treatment of patients with diseases of the temporomandibular joint and masticatory muscles. Therapeutic and diagnostic devices. Types of occlusal tires. Stage complex treatment. Tactics of management of patients with pathology of occlusion, TMJ, masticatory muscles.

Developers:

Medical director of the Department of Prosthodontics,

Professor, PhD I. Yu. Lebedenko

Department of Prosthodontics Professor, PhD M. V. Bykova

Department of Prosthodontics, Assistant Professor, PhD A. S. Unkovskiy

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Prosthetics (simple prosthetics)	
Scope of the discipline	2 credit units (72 hours)	
The summary of the discipline		
Titles of parts (topics) of discipline	Titles of parts (topics) of discipline	
1. Methods of examination of patients in the clinic of prosthetic dentistry. Organization of prosthetic dental care.	Modern facilities, equipment, tools at the workplace of a prosthodontist. Medical documentation, the rules for filling it. Sanitary and anti-epidemic measures.	
2. Pathology of dental hard tissues. Methods of examination of patients with defects of dental hard tissues. The structure of the diagnosis in the clinic of prosthetic dentistry.	Pathology of dental hard tissues. Classification. Etiological factors, clinical view. Differential diagnostics. The structure of the diagnosis in the clinic of prosthetic dentistry. Types of dentures that restore the anatomical shape and size of a dental crown. The choice of the method of prosthetic treatment, depending on the index of clinical dental crown destruction. Index of occlusal surface destruction. Preparation of the patient's oral cavity for prosthetic treatment of patients with defects in hard dental tissues. Anaesthesia methods during tooth preparation. Prescription and rules of operation of cutting tools used for teeth preparation in prosthetic dentistry. Characteristics of impression materials used in prosthetic dentistry. Stage of tooth color determination.	
3. Methods of prosthetic treatment of patients with defects of dental hard tissues by inlays.	Indications and contraindications to prosthetic treatment by inlays, onlays, etc. Materials for manufacturing. Clinical and laboratory stages of production of inlays, onlays, etc.	
4. Methods of prosthetic treatment of patients with defects of dental hard tissues by crowns.	Artificial dental crowns. Indications and contraindications for prosthetic treatment with artificial crowns. Types, classification of artificial crowns. Materials and methods for producing artificial crowns. Features of the tooth preparation for producing different kind of crowns. Criteria for assessing the quality of tooth preparation. Clinical stage of fixation prosthetic restorations. Fixation types: temporary, permanent; cement, adhesive. Types of cements and materials used for fixation of crowns, inlays, veneers, posts. Features of adhesive fixation technique.	

5. Methods of prosthetic treatment of patients with total destruction of the crown of the tooth.

Types of prosthetic post-n-core structures (anchor pins, stump pins, pin teeth). Indications and contraindications to prosthetic treatment of single-root and multi-rooted teeth with post-n-core structures. Clinical and laboratory stages of producing. Possible errors and complications.

Developers:

Professor of the department of prosthetic dentistry

M. S. Deev

Associate professor of the department of prosthetic dentistry

D. V. Sopotsinsky

Head of the department of prosthetic dentistry

I. Yu. Lebedenko

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the Discipline	Prosthetics in total absence of teeth
Volume of discipline	3 credit units (108 hrs.)
Short description of the discipline	
Name of the topics of	Short description of topics of the discipline:
the discipline	Short distribution of topics of the distribution
1. Methods of survey,	Peculiarities of clinical survey of patiens with edentulous jaws.
diagnostics of patiens with	Definition of morphological peculiarities hard and soft tissues of
edentulous jaws	prostetic field, the degree of atrophy of the bone tissue of the
	alveolar processes and the body of the jaws, compliance of
	mobility of the mucosa.
	Stucture and relation of edentulous jaws. Classification of
	edentulous jaws. Compliance and mobility of the oral cavity
	mucosa. Classification of mucosa by Supple.
2.Methods of prostetic	Fixation and stabilization of complete dentures. Biophysical and
treatment of patiens with	functional factors laying in the basis of fixation of complete
edentulous jaws	dentures on edentulous jaws. Meanning of flap zone.
	Anatomical impressions, method of gathering, materials. Individual
	spoons, characteristics, methods of fabrication and materials that
	are used. Fitting of individual spoons by Gerbst. Impression
	materials. Obtaining and assessment of functional impressions.
	Justification of the choice of impression material for getting
	functional impressions.
	The borders of denture's basis with edentulous jaws.
	Fabrication of wax basis with occlusial mold.
	Determination of centric relation with edentulous jaws.
	Anatomic – fisiological method of recovery of jaws relation of lower part of the face.
	Regularities of occlusion and articulation of teeth. Design of
	dentition with edentulous jaws in orthognatic bite. Features of
	setting teeth in orthognatic and progenia relations of alveolar
	processes.
	«Spherical» theory of articulation, it's realisation in practical
	recovery of dentitions with edentulous jaws.
	J
	Verification of wax construction of full. Analysis and correction of
	doctors' and dental technitian mistakes in determination of jaws
	relation.
	Fitting and superposition of full dentures. The rules of use and
	correction of full dentures. The tactic of patient management in
	long terms. Adaptation to complete dentures.
3.Clinical – laboratory	Compression and cast pression of plastic. Methods of wax
steps in fabrication of	prosthesis gypsum in flask. Basis plastics. The mode of
complete dentures with	polimerisation. The types of defects in plastics by interruption of
edentulous jaws	polimerisation mode. Clinical – laboratory steps in fabrication of
	complete dentures with different basis constructions (plastic,
	bilayer, with relief of hard palate, volume modeling). Features of
	prostetic treatment of patients with edentulous jaws with decrease

of lower part of the face, repeated prosthetics, with deseases of mucosa, with increase of vomitive reflex. Bilayer basis of comp dentures with edentulous jaws. Indications, manufacturing procedure.	
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Developers: Professor of the department of prosthetic dentistry

M. S. Deev

Associate professor of the department of prosthetic dentistry

D. V. Sopotsinsky

Head of the department of prosthetic dentistry

I. Yu. Lebedenko

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Discipline Name	Prosthetics (complicacy prosthetics)		
Discipline Amount	8 CU (288 hours)		
	Title strip of subject		
Discipline Titles	Course subject		
Replacement of dentition defects with fixed prosthodontics structures	Partial teeth absence. Methods of patient examination. Compelling reasons of using bridge (bridgework) restoration. Indications and contraindication for using bridgeworks. Principle ob abutment teeth choosing. Types of bridgeworks. Clinical and laboratory steps of bridge restoration treatment. Principle of abutment teeth preparation. Try in and fixation of bridge restoration. Quality criteria of bridgework. Items of bridgework care.		
2.Removable denture treatment	Examination of patient with partial teeth absence for future planing removable restoration. Indications and contraindications for removable denture restoration. False teeth selection. Landmarks for false teeth setting up. Clinical steps of quality checking. Criteria of removable denture quality. Clasp dentures. Indications and contraindications for clasp denture restoration, basic structural elements. Clinical and laboratory steps. The methods of clasp and partial dentures try-in. Criteria of removable denture quality. Rules for the use and care of removable dentures.		
3. Prosthetic treatment of periodontal diseases	Etiology, pathogenesis, classification, clinical manifestations of periodontal disease. Modern methods of diagnosis in the clinic of prosthetic dentistry. Clinical and biomechanical substantiation of the orthopedic stage of complex treatment of patients with periodontal disease, especially the design of medical devices and prostheses. Clinical and laboratory stages of manufacturing splinting structures.		
4. Prosthetic treatment of increased abrasion of hard tissues of teeth	Etiology, pathogeny, classification and clinical symptoms of excessive attrition of teeth. Diagnostic aids and prosthetic restoration of excessive attrition of teeth.		
5. Prosthetic treatment of deformations and anomalies of dentition and bite.	Etiology, pathogenesis, classification, clinical manifestations of deformation of the dentition and bite in the partial absence of teeth. Modern methods of diagnosis. Methods of elimination of deformation and justification of tactics of management of patients with this pathology. Stages of treatment.		

6. Prosthetic treatment of patients with	Indications and contraindications to the use of dentures
dentures supported by implants	based on implants. Features of clinical and laboratory stages of prosthetic treatment with removable and fixed
	dentures based on implants.
7. Prosthetic treatment of patients with somatic diseases. Prosthetic treatment of patients with chronic diseases of the oral cavity.	Tactics of prosthetic treatment patients with somatic pathology (CVS, GIT, endocrine diseases, cancer of oral cavity, mental diseases, infection diseases (HIV, tuberculosis, candida), chronic diseases of skin and mucous of oral cavity and lips)

Developers:

Professor of the department of prosthetic dentistry

M. S. Deev

Associate professor of the department of prosthetic dentistry

D. V. Sopotsinsky

Head of the department of prosthetic dentistry

I. Yu. Lebedenko

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Science of Dental Materials	
Volume of the discipline	4 CU (144 hours)	
Short contents of the discipline		
Names of the sections of the discipline	Short contents of the sections (topics) the discipline	
Science of Dental Materials	Introduction to the specialty. Dental materials science as an practical science of materials used in the work of a dentist. Classification of dental materials. The principles of its construction. Security Essentials. The concept of main and auxiliary materials used in prosthetic dentistry. Classification, application. Gypsum, physico – chemical properties, composition. Standardization according to GOST. The method of working. Features of hardening with the use of inhibitors and catalysts. Dental impression materials. Classification, composition, physico – chemical properties. The requirements to them. Standard impression spoons. Dental wax. The requirements, classification, physico-chemical properties, composition. Standardization according to GOST. Polymer materials, their use in dentistry, classification, physico-chemical properties, composition. The technology of work with plastic, safety. Metals and alloys used in dentistry. Classification, physico-chemical properties, composition. Grade of stainless steel. Dental porcelain. Ceramics. Classification, physico-chemical properties, composition. Application in dentistry. Dental instruments. The materials used for the manufacture of dental tools. Tools for processing of hard tooth tissues: burs, types, indications for use. Filling materials. Classification, quality standards, physico-chemical properties, composition. Requirements for filling materials. Group of materials used for temporary filling of teeth. Classification, physico-chemical properties, composition. Indications. Methods of working with them. Materials for isolative lining (zinc-phosphate, polycarboxylate, glass ionomer (GIC), cement, physico-chemical properties. Materials used for root canal filling. Classification. Application. Materials for curative liners, their types, physico – chemical properties, composition. Purpose and method of application. Materials for permanent fillings. Composite filling materials. Classification, composition, physico-chemical	

properties. The adhesive system. Materials for permanent fillings. Polymeric restorative materials (compomers, ormocer). Classification, physico – chemical properties, composition. Metals and their alloys used for dental fillings. Classification, physico – chemical properties, composition. The method of preparation of amalgam. Safety and hygiene requirements working with amalgam.

Developers:

Head of the department of dental propedeutics

S.N. Razumova

Senior professor of the department of dental propedeutics

A.S. Manvelyan

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Discipline title	Maxillo-facial and Orthognathic surgery	
The amount of the discipline	6 CU (216 hours)	
Content of the discipline		
Titles of the discipline subjects	subjects content	
1. Abscesses and phlegmon of maxilla-facial	1.Abscess and phlegmon of face and neck.	
region and neck	Classification, general principles of diagnostics.	
2. Specific inflammatory pathology of	Changes of immune reactivity in cases of	
maxilla-facial region and complications of	odontogenic inflammatory pathology. Abscess	
pus-inflammatory processes	and phlegmon of maxillary region. Topographic	
3. Pathology of salivary glands	anatomy. Possible ways of infection spreading.	
4. Non-gunshot fractures of jaws	Clinics, diagnostics, differential diagnostics.	
5. Military maxilla-facial surgery	2. Specific inflammatory processes in maxilla-	
6. Pathology of trigeminal and facial nerves	facial region. Actinomycosis. Etiology,	
7. Pathology of temporal-mandibular joint	pathogenesis, classification. Clinics, diagnostics,	
8. Reconstructive surgery of maxilla-facial	differential diagnostics. Treatment of	
region	actinomycosis of maxilla-facial region.	
9. Anomalies and deformities of maxilla-	Tuberculosis, syphilis of maxilla-facial region.	
facial region	Specifics of clinics, diagnostics, treatment.	
	Furuncle, carbuncle of maxilla-facial region.	
	Erysipelas.	
	3. Reactive dystrophy of salivary glands. Sialosis.	
	Shorten syndrome, disease of Mikulich.	
	Pathogenesis, clinics, diagnostics, differential	
	diagnostics, treatment.	
	Inflammatory pathology of salivary glands	
pus-inflammatory processes 3. Pathology of salivary glands 4. Non-gunshot fractures of jaws 5. Military maxilla-facial surgery 6. Pathology of trigeminal and facial nerves 7. Pathology of temporal-mandibular joint 8. Reconstructive surgery of maxilla-facial region 9. Anomalies and deformities of maxilla-	and phlegmon of maxillary region. Topographic anatomy. Possible ways of infection spreading. Clinics, diagnostics, differential diagnostics. 2. Specific inflammatory processes in maxillafacial region. Actinomycosis. Etiology, pathogenesis, classification. Clinics, diagnostics, differential diagnostics. Treatment of actinomycosis of maxilla-facial region. Tuberculosis, syphilis of maxilla-facial region. Specifics of clinics, diagnostics, treatment. Furuncle, carbuncle of maxilla-facial region. Erysipelas. 3. Reactive dystrophy of salivary glands. Sialosis. Shorten syndrome, disease of Mikulich. Pathogenesis, clinics, diagnostics, differential diagnostics, treatment.	

Developers:

Associate Professor, Department of Maxillofacial Surgery

Zandelov V.L.

Head of the Department of Maxillofacial Surgery

Ivanov S.Yu.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Discipline title	Head and neck diseases	
The amount of the discipline	2 CU (72 hours)	
Content of the discipline		
Titles of the discipline subjects	subjects content	
 Benign tumors Malignant tumors Pathology of trigeminal and facial nerves 	1.Tumors and tumorous formations. Statistics, classification of tumors of maxilla-facial region. Odontogenic tumors. Etiology, pathogenesis, clinics, diagnostics, differential diagnostics, treatment. Jaws cysts. Etiology, pathogenesis, clinics, diagnostics, treatment. Non-odontogenic jaws' tumors. Osteogenic tumors. Clinics, diagnostics, treatment. Non-osteogenic jaws' tumors. Clinics, diagnostics, treatment. Tumorous formation of jaws. Clinics, diagnostics, treatment. Progeny cysts and fistulas of face and neck. Clinics, diagnostics, treatment. Benign tumors of maxilla-facial soft tissues. Clinics, diagnostics, treatment. 2. Modern explanation of biological concept of tumors. Theories of cancerogenesis. Organization of oncological dental care. Dispancerizacia of oncological dental patients. Group of dispancerizacia. Examination methods and diagnostics in the group of patients with malignant tumors of maxilla-facial region.	

Developers:

Associate Professor, Department of Maxillofacial Surgery

Zandelov V.L.

Head of the Department of Maxillofacial Surgery

Ivanov S.Yu.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Discipline title	Paediatric maxillo-facial dentistry
The amount of the discipline	3 CU (108 hours)
	Content of the discipline
Name of the Discipline	Name of the Discipline
Anesthesia in pediatric surgical dental practice. Tooth extraction operation in children	Anatomical and physiological features of the child's body. Indications and contraindications to General and local anesthesia during outpatient dental surgery in children. Value of premedication. Types of local anesthesia, especially in children. Emergency conditions on an outpatient dental reception. Indications and features of removal of temporary and permanent teeth in children. Complications during and after tooth extraction surgery, their prevention and elimination. Tactics of doctor-dentist in the presence of supernumerary, impacted and dystopic teeth in children.
Inflammatory diseases of the maxillofacial region in children.	Features of odontogenic inflammatory processes in childhood. Inflammation of the soft tissues of the face: lymphadenitis, abscess, phlegmon. Clinical picture of acute and chronic periostitis of the jaw bones in children of different ages. Acute odontogenic osteomyelitis of the jaws, hematogenous osteomyelitis of newborns and young children. Clinical and radiological forms of chronic osteomyelitis of the jaws, principles of rehabilitation of children. Odontogenic inflammatory cysts in children. Possible complications, their prevention.
Diseases of the salivary glands in children.	Classification of diseases of the salivary glands in children. Acute mumps of the newborn, acute epidemic mumps, chronic parenchymal mumps. Salivary stone disease. Etiology, pathogenesis, clinical picture, diagnosis, treatment, possible complications.
Maxillofacial trauma in children.	Dislocations and fractures of teeth in children: clinic, treatment, methods of immobilization, outcomes. Bruises and fractures of facial bones in children. Clinic, diagnosis. Methods of conservative and surgical treatment of fractures in children, healing time, possible complications and methods of their prevention. Causes of damage to the soft tissues of the mouth and face in children. Features of primary surgical treatment of facial wounds. Burns and frostbite. Clinical picture, treatment, complications. General indications for plastic surgery in childhood. Principles of rehabilitation of children who have suffered trauma of the maxillofacial region.
Diseases of the temporomandibular joint in children.	Primary bone diseases of the temporomandibular joint. Osteoarthritis, secondary deforming osteoarthritis, bony ankylosis, neurotron: etiology, pathogenesis, clinical picture. Diagnosis, principles of complex treatment of diseases of the temporomandibular joint in children. Methods of surgical treatment, age indications. Goals and objectives of orthodontic treatment. Methods of preventing the development of primary bone diseases. Functional diseases of the temporomandibular joint in childhood and adolescence.

	Etiology, pathogenesis, clinical manifestations. Additional methods of
	examination (electromyography, axiography, TMJ). Diagnosis, treatment,
	prevention.
	Causes of embryonic development of the face and jaws. Congenital
	malformations, their types. Congenital facial cleft: causes and mechanism of
	formation, types, prevalence. Congenital syndromes involving the oral and
	maxillofacial region. Medical and genetic counseling. Congenital cysts and
Congenital and	fistulas of the maxillofacial area and neck. Dermoid and epidermoid cysts.
hereditary diseases of	Congenital cleft upper lip and palate. Prevalence, classification, anatomical and
the maxillofacial	functional disorders, impact on the overall development of the child.
region in children.	Secondary jaw deformities in cleft palate. Age indications for surgical
8	treatment, the purpose of operations. Clinical examination of children with
	congenital cleft upper lip and palate. Congenital pathology of the oral mucosa:
	anomalies of the frenulum and tongue attachment, small vestibule of the oral
	cavity. Clinical picture, indications for surgical treatment, methods of
	operations, features of the postoperative period.
	Benign and malignant tumors of the soft tissues of the face and mouth in children. Classification, clinical picture, diagnosis, differential diagnosis.
	Tumors and tumor-like processes of salivary glands in children. Benign and
Tumors and tumor-	malignant tumors of facial bones in children. Odontogenic formations - cysts,
like processes of the	odontogenic tumors of the jaws. Etiology, clinical picture, diagnosis. Features
maxillofacial region in of the clinical course of tumors and tumor-like formations in children. Tactics	
children.	of surgical treatment of tumors of the maxillofacial region in children,
	indications and contraindications to the use of radiation therapy, the principles
	of comprehensive rehabilitation of children. The principle of cancer alertness at
	an outpatient dental appointment.

Developers:

Associate Professor, the Department of Paediatric Dentistry and Orthodontics

A.E. Anurova

The Head of the department of Paediatric Dentistry and Orthodontics, professor

T. F. Kosyreva

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Subject name	Maxillo-facial prosthetics	
Subject capacity	2 CU (72 hours)	
Subject summary		
Learning packages	Description	
Maxillofacial prosthetics. Diagnostic measures and principles. Capturing of facial defects. Impression taking techniques	General considerations about facial and maxillofacial prosthetics. Classification of facial defects and consequent functional disorders. Prosthetic stage as a part of complex rehabilitation process of patients with facial disfigurements. Types of facial prostheses, retention methods. Materials for facial prostheses manufacturing. Endosseous implant supported prostheses: treatment planning. Conventional and digital workflows of facial prostheses manufacturing. Modern imaging systems for the virtual capturing of facial defects. Working cast fabrication for auricular, nasal and orbital prostheses.	
Facial prosthetics. Technical approaches and methods of facial prostheses manufacturing. Conventional and digital workflows	Detailed characteristics of clinical and laboratory steps for facial prostheses manufacturing. Conventional workflow for auricular, nasal and orbital prostheses. Digital workflow for facial prostheses manufacturing. Computer aided design and manufacturing (CAD/CAM) in maxillofacial prosthetics. Modern software solutions for CAD. General terms and consideration about 3D printing in medicine, dentistry and maxillofacial prosthetics. Maintenance of adequate hygiene level and aftercare for facial prostheses. Recall periods. Complication in facial prosthetics.	
3. Maxillofacial prosthetics. Prosthodontic stage as a part of complex rehabilitation process of facial tumors patients.	Rehabilitation and management of maxillectomy patients. Preprosthetical surgical enhancement. Detailed characteristics of clinical and laboratory steps for obturator prostheses manufacturing. Phases of prosthetic restoration. Clinical management and prosthetic restoration of edentulous and dentate maxillectomy patients.	

4. Maxillofacial prosthetics. Prosthetics rehabilitation of patients with congenital palatal malformations and acquired defects.

Prosthetics rehabilitation of patients soft and hard palate defects. Types of appropriate prosthetic appliances and their manufacturing workflow. Facial and bite guards as a prophylactic aid of facial bone fractures. General characteristics and manufacturing approaches.

Developers:

Medical director of the Department of Prosthodontics,

Professor, PhD I. Yu. Lebedenko

Department of Prosthodontics Professor, PhD M. V. Bykova

Department of Prosthodontics, Assistant

Professor, PhD A. S. Unkovskiy

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Course name	Paediatric Dentistry		
The volume of	4 CU (144 hours)		
the discipline			
•	Discipline summary		
Name of sections (topics) of the discipline	Abstract of sections (topics) of the discipline:		
Dental caries in children	Anatomical and physiological features of teeth in children. Methods of examination of the child in the clinic of paediatric therapeutic dentistry. Aetiology and pathogenesis of dental caries in children. The caries classification. Clinical features of dental caries in children of different age groups. Methods of caries diagnosis of temporary and permanent teeth. The enamel caries of temporary and permanent teeth in children. The dentine caries of temporary and permanent teeth in children. The caries of the cement of temporary and permanent teeth in children. The caries treatment of permanent and temporary teeth. Arrested dental caries. Complications in dental caries treatment in children. Prevention of dental caries in children.		
Non-carious lesions of the teeth's hard tissues.	The main stages of teeth development and mineralisation. Classification of the teeth hard tissues pathology arising during their follicular development. Enamel hypoplasia. Systemic enamel hypoplasia. Tetracycline teeth. Other types of SEH. Local hypoplasia. Endemic dental fluorosis. Enamel hyperplasia. Inherited disorders of dental tissues development. Hereditary imperfect amelogenesis. Imperfecta dentinogenesis and odontogenesis. Diagnosis, differential diagnosis, treatment and prevention of non-carious diseases.		
Pulpitis in children	Anatomical and physiological features of the pulp of primary and permanent teeth in children of different ages. Aetiology and pathogenesis of pulpitis. Classification. Clinical features. Methods for assessing the pulp condition in children. Diagnosis of pulpitis in children. Methods of pulpitis treatment of primary and permanent teeth in children. Conservative method of pulpitis treatment of primary and permanent teeth in children. Devital method of pulpitis treatment of primary and permanent teeth in children. Treatment of pulpitis in children under anaesthesia. Errors and complications in the diagnosis and treatment of pulpitis in children.		
Periodontitis in children	Classification and clinical picture of periodontitis in children. Diagnosis and differential diagnosis of periodontitis. Treatment of primary teeth periodontitis in children. Treatment of permanent teeth periodontitis in childhood. Long-term results of periodontitis treatment in children. Emergency dental care for children.		

Acute teeth injuries in children	Classification of acute dental injury in children. Differential diagnosis. The concussion of primary and permanent teeth in children. Dislocations of primary and permanent teeth in children. Crowns fractures of primary and permanent teeth in children. Roots fractures of the primary and permanent teeth in children. Clinical features, diagnosis and treatment of acute dental injury in children.
The oral mucosa diseases in children	Anatomical and physiological features of the oral mucous membrane in children. Classification of oral mucosa diseases. Traumatic injuries of the oral mucous membrane. Candidiasis in children. Acute herpetic stomatitis in children. Clinical features. Diagnostics. Treatment. Recurrent herpetic stomatitis. Herpangina. Strepto-staphylococcal lesions of the perioral region and lips. The manifestation of acute infectious diseases on the oral mucosa in children. Treatment. The condition of the oral mucosa in children with diseases of internal organs and systems. Manifestations of drug and bacterial Allergy in the oral cavity in children. Erythema multiforme, Stevens-Johnson syndrome. The recurrent aphthous stomatitis. Behcet's Disease, Lyell's syndrome. The manifestation of HIV-infection in the oral cavity in children. The oral mucosa lesions in children caused by tuberculosis and syphilitic infection. Differential diagnosis of various lesions of the oral mucous membrane in childhood.
Diseases of the	Cheilitis in children, clinical features, diagnosis and treatment. Glossitis in
lips, tongue and	children, clinical features, diagnosis and treatment. Anatomical and
parodontal disease	physiological features of the parodont in children. Parodontal disease in
in children.	childhood. Classification. Gingivitis and parodontitis in childhood. Idiopathic
	diseases with progressive lysis of parodontal tissues. Clinic, diagnosis and treatment of parodontal disease in children.

Developers:

Associate Professor, the Department of Paediatric Dentistry and Orthodontics

A.E. Anurova

The Head of the department of Paediatric Dentistry and Orthodontics, professor

T. F. Kosyreva

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Orthodontology and pediatric prosthetics				
The scope of the discipline	6 CU (216 acad. hour.)				
Summary of the discipline					
Name of sections (subjects) of discipline	Summary of sections (subjects) of discipline:				
Introduction to orthodontics. Age features of the tooth-jaw system in children. Dental anomalies and deformities. Classification. Methods of examination in orthodontics.	Anatomical and physiological features of teeth in children. The development and growth of the head. The development of the facial skeleton. The growth and development of the jaws. The formation of occlusion of the dentition. Periods of development and formation of the dental system. Morphological features of the forming dentition and their clinical evaluation. Epidemiology, etiology and prevention of dental anomalies. Classification of Anglo and Katz occlusion anomalies. Modern classes of dentofacial and facial anomalies, clinical forms (Prof. Horoshilkina, MGMSU, Professor Malygin) Classification of dental anomalies. WHO (X).				
Clinical examination methods. Additional survey methods.	Clinical examination methods. Complaints and history. Examination of the patient. Examination of the psychosomatic state of the body. Examination of the face (determination of its symmetry, proportionality). Examination of the oral cavity. Examination of the oral organs and soft tissues. Examination of the teeth. Examination of the dentition, the concept of emerging dental anomalies. Determination of the type of bite, setting a preliminary diagnosis. Examination of alveolar processes. Examination of the state of the periodontum. Clinical functional tests (by Ilina-Markosyan, Eshler-Bittner, etc.). Breath rating. Examination of swallowing. Examination of speech functions (violation of language articulation and pronunciation of sound phonemes). Examination of the function of the temporomandibular joints. Features examination of young children. Additional research methods. Assessment of the physical development of the subject Measurement of body height, weight. Violation of posture. Compliance of somatic development with the average norm (pediatric indices). Data analysis of additional research methods Allergic status. Medical genetic research. Endocrinological status. Anthropometric studies in the dental-maxillofacial region. Face measurement, face type determination. Labiometry. Measurement of the sagittal and vertical gap between the incisors. Biometric study in the oral cavity, on models of the jaws and on face masks.				

Anthropometric research methods. Methods of treatment in orthodontics. Orthodontic appliances. Classification.	The study of diagnostic models of the jaws. Measurement of teeth and dental arch segments. The method of measuring the width of the dentition. Measurements of mesiodistal sizes of teeth and segments of dental arches. Measurement of the width of the dentition. Measurement of the length of the dental arch on the occlusal curve. Measurement of the size of the anterior segment of the dental arch. Study of the areas of the triangles of the dental arches. Study of sky areas in sagittal, transverse and vertical directions. Measurements of the width of the apical basis. Measurements of the length of the apical basis. Determination of lack of space for improperly spaced teeth. Analysis of the measurement models of the jaws. Radiological methods of research. Survey X-ray. Orthopantomography of the jaws. TRG of the head. Methods for the study of lateral TRG of the head and the basic principles of their analysis. Methods for comparing lateral TRG of the head, obtained before orthodontic treatment, during treatment and after its termination. Methods for the study of direct TRG of the head. The method of analysis of TRG of the head using computer programs
Removable and fixed orthodontic appliances. Bracket system.	Removable orthodontic appliances for the expansion and distalization of the dentition. Features setting screws. Fixed equipment - braces systems (lingual and vestibular). Types of braces - ligature and self-ligating. Active and passive self-ligating braces. The concept of torque, angulation. Features of the selection of braces with vestibular and palatal tilt of the front teeth (with positive and negative torque). Orthodontic archwire, the sequence of changing archwire in the treatment process. Retainers, retainer types - removable and non-removable. The duration of the retention. Fixed expanding devices (Derichsweiler, Haas). Extraoral apparatuses - facial arch, Dilyara mask, chin sling - indications for use, application features.
Mechanical appliances. Functional appliances. Combined appliances.	Mechanical appliances - removable orthodontic appliances for the expansion of dentition, for the distalization of molars. Structure of the mechanical appliances, additional elements. Functional appliances: removable and fixed; active and passive. Structure of the functional appliances, additional elements. Bionator, Twin-block, Herbst, Jasper Jumper, Frankel. Combined appliances - these are devices that combine a screw, occlusal lining, vestibular pilots, bite areas, inclined plane.
Biomechanics of tooth moving	Biophysical bases of the appliance treatment. The orthodontic force. Phases of the tooth movement. Anchorage. Fixation of orthodontic appliances. Having space for incorrectly positioned teeth and removing obstacles to their movement. Classification of the main types of orthodontic appliances.
Orthodontic diagnosis. Orthodontic treatment planning.	Principles of construction of the diagnosis. The sequence of the formulation of the diagnosis in combined pathology. Determining the degree of difficulty of treatment. The final diagnosis. Treatment planning. Case history of an orthodontic patient. Aims of orthodontic treatment. Elimination of morphological, functional, aesthetic disorders. Determination of treatment prognosis. Normalization of the dentition, occlusion and face shape based on the

data of studying models and OPG jaws, TRG of the head, photos of the face. Preparing the patient for treatment. Psychotherapeutic training. Preparation of the oral cavity: Therapeutic, Surgical, Prosthetic.
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Developers:

The Head of the department of Paediatric Dentistry and Orthodontics, professor

T. F. Kosyreva

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of the Discipline	Russian language (professional level)			
General labour intensity	2 CU (72 ac. hours)			
Sections of the disciplines	Summary of sections			
UNIT 1. STOMATOLGICAL DISEASE				
Theme 1. Etiology of stomatological disease (pathological state)	Connection between a factor and a pathological condition; the possibility of communication between the factor and the occurrence of a pathological state. The cause of the pathological state; the condition of the pathological state's appearance.			
Theme 2. The development of dental disease (pathological state)	Dynamics of the pathological process. The object's change of the size, color and shape; treatment and destruction of an object. Process violation; the relationship between processes and phenomena; the nature of the impact of the processes; proportional change			
Theme 3. Clinical picture of dental disease	Subjective complaints of the patient; objective data on the clinical manifestations of the disease; clinical manifestations identified using instrumental methods of examination.			
UNIT 2.TREATMENT OF DENTAL DISEASE				
Theme 1. Methods of examination of the patient with dental problems	Purpose of the examination method; the object of study; the means (instrument) with which the examination is carried out; the value of the survey method.			
Theme 2. Dental disease treatment methods	Essence of the method of treatment; the purpose of the treatment method; scope of treatment method.			
Theme 3. Stages of treatment of dental disease	Sequence of treatment methods, indications and contraindications to the use of treatment methods.			
Theme 4. Dentist's recommendations, disease prevention	Recommendations and prohibition of the doctor to perform any action. Purpose of a method of treatment, a medical procedure, a medicinal preparation. Disease prevention; disease prevention measures.			

Developers:

Associate professors of the Russian language department of Medical Institute
Associate professors of the Russian language department of Medical Institute

V.B. Kurilenko

M.A. Makarova

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Discipline	Russian language and speech culture
General labour intensity	3 CU (108 hours)
Sections of the disciplines	Summary of sections
CULTURE OF ACADEMIC AND	Russian language and speech. A culture of speech.
SCIENTIFIC COMMUNICATION	Types of communication: academic, scientific etc.
	The basic concepts of the course.
	Literary language, literary and linguistic norm.
	Types of norms.
	Speech and its characteristics.
	Speech influence.
	The methods of persuasion.
	The basic norms and rules of non-verbal and
	verbal etiquette.
	Professional communication: the essence,
CULTURE OF PROFESSIONAL	features, innovative technology tools.
COMMUNICATION	Communicative portrait of a specialist.
	Oral professional communication: general
	concept, the basic communication forms and
	signs.
	Written speech of a doctor.
	Innovative informational and communicative
	technologies of a professional interaction.
	Tolerant intercultural professional
	communication: the basic principles and
	strategies.

Developers:

Associate professors of the Russian language department

of Medical Institute Yu.N. Gosteva,

Associate professors of the Russian language department

of Medical Institute R.A. Arzumanova

Associate professors of the Russian language department

of Medical Institute M.A. Bulavina.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of Discipline	Medical emergencies in out-patient dentistry
	practice
Volume of Discipline	2 CU (72 hours)
	nt of the discipline
Name of sections(topics) of the discipline	Summary of sections (topics) of the
	discipline:
I. Organization of work of the dentist in case of emergency at the outpatient clinic	1. Definition of emergency conditions, especially dental and outpatient centres, medical history, the first aid kit for emergency with somatic complications in the dental offices.
II. First aid for emergency conditions and	1. Emergency care in hypertension.
diseases	2. Emergency care in coronary heart disease, stroke, myocardial infarction.
	3. Emergency care in faint, epiperipatus, shock, collapse.
	4. Emergency treatment of bleeding in hemorrhagic shock in case of accidental injecting corrosive liquids.
	5. Differential diagnosis of head (face) pain: neuralgia of the facial nerve, trigeminal neuralgia.
	6. Emergency aid at acute allergic diseases: urticarial, angioedema, anaphylactic shock.
	7. Emergency aid in bronchial asthma, status asthmaticus.
	8. Coma. Emergencies in diabetes. Hyperglycemic coma. Hypoglycemic coma.
III. Basics of cardiopulmonary resuscitation	1. Emergency care for airway obstruction and hypoventilation. CPR when stop breathing and blood circulation.

Developers:	
Associate Professor of department of General	
medical practice	E.I. Rusanova
Associate Professor of department of General	
medical practice	E.V. Mitina
Programme manager Professor	V.I. Kuznetsov
Head of department of General medical practice	N.V. Sturov

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of discipline	Topographic anatomy and operative surgery of the head and neck
General labour intensity	3 CU (108 Hours)
Course summary	
The name of the discipline sections	Summary sections of subjects:
Topographic anatomy of the head	Topographic anatomy of the cerebral part of head. Cranial convex. Fronto-parietal-occipital, temporal region, the region of the mastoid process. Brain membranes and intermeningeal spaces. Venous sinuses of the dura mater. The blood supply to the brain. Topographic anatomy of the facial part of the head. Anterior face region. The region of the orbit. Infraorbital and zygomatic regions. Nose region. External nose. Nasal cavity. Paranasal sinuses. Pathways of pus at sinusitis. Topographic anatomy of the mouth region. Lips. The vestibule of the mouth. The teeth, gums. Oral cavity: hard palate, soft palate, tongue. The bottom of the oral cavity. Malformations of the lips, hard palate and operations at them. Incisions in phlegmon of the mouth floor. Topographic anatomy of the lateral superficial region of the face. Surgical anatomy of the facial nerve. Buccal region. Fat body of the cheek. Parotid-masseteric region. Surgical anatomy of the parotid salivary gland. Incisions at parotiditis. Surgical anatomy of the temporomandibular joint. Topographic anatomy of the deep lateral region of the face. Venous pterygoid plexus. Surgical anatomy of the maxillary artery and mandibular
Topographic anatomy of the neck	nerve. Cellular spaces and pathways pus spreading. Topographic anatomy of the neck. Fascias and cellular spaces. The middle region of the neck. Submandibular and carotic triangles. Submental and omo-tracheal triangle. Sterno-cleido-mastoid region. Scaleno-vertebral triangle. The lateral neck region. Surgical anatomy of the subclavian artery and vein, the brachial plexus. Surgical anatomy of the larynx, trachea, pharynx, cervical part of esophagus and thyroid gland.
Operative surgery of the head and neck	Surgical instruments. Suture material. The main elements of operational techniques are: the separation of tissues, cauterization, technology application and removal of skin sutures, tying

ligature knots. Equipment for suturing wounds on face (hidden, plate suture). Operations on the calvaria. Primary surgical treatment of wounds areas of the cranial vault. Ways to stop bleeding of damaged soft tissues, bones of the cranial vault, middle meningeal artery, sinuses. venous Trepanation of the skull: osteoplastic and resection (decompressive). Special instruments. Principles of surgical treatment of wounds of the maxillofacial region. Incisions in purulent processes. Incisions at purulent inflammation of the middle of the neck. Ligation operation facial, lingual, common and external carotid artery. Tracheostomy (types and methods, intra-and postoperative complications). Conicotomy. The operation on the thyroid gland

Developers:

Professor of Department Operative surgery and Clinical Anatomy

E.D. Smirnova

Associate Professor of Department Operative surgery and Clinical Anatomy

D.L. Titarov

Head of Department Operative surgery and Clinical Anatomy

A.V. Protasov

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Innovative Technologies in Dentistry
The amount of discipline	2 Credits (72 hours)
Discipline summary	
Name of sections (topics) of the discipline	Summary of sections (topics) of the
	discipline:
The method of infiltration – ICON	The method of infiltration - ICON
Method of chemical-mechanical removal of carious lesions. Carisolv System. Non-invasive dental treatments	Method of chemical-mechanical removal of carious lesions. Carisolv System. Dental drug Safaraid for the treatment of dental caries. Air-abrasive and water – abrasive methods of treatment of dental diseases. The method of treatment of dental caries - ozone therapy. Renteria. Deep fluoridation of the hard
	tissues of the tooth. Principles of minimally invasive technologies.
	Diagnostic dissection of fissures. Fissurotomy.
	Tunnel dissection. Ultrasonic preparation of hard tooth tissues.
	Laser dissection of hard tooth tissues.
A.R.T.technique	Indications and principles of treatment. Hand tools used for minimally invasive techniques of tooth treatment. Filling materials: glass ionomer cements, compomers, fluid composites.

Developers:

Professor of conservative dentistry department

F.Yu. Daurova

Associate Professor of Conservative Dentistry department

I.V. Bagdasarova

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Discipline title	Implantology and reconstructive surgery
The amount of the discipline	2 CU (72 hours)
Content of the discipline	
Titles of the discipline subjects	subjects content
 Periodontology Dental and maxilla-facial implantation 	 Surgical treatment methods of periodontal pathology using tissues transposition and bone augmentation Dental and maxilla-facial inmlantology in dentistry. Surgical preparation of oral cavity for the prosthetic treatment.

Developers:

Associate Professor, Department of Maxillofacial Surgery Zandelov V.L.

Head of the Department of Maxillofacial Surgery Ivanov S.Yu.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Dental Oncology and radiotherapy
Volume discipline	2 CU (72 h).
Summary disciplines	
The section titles (the) discipline	Summary of sections (so) discipline:
Current treatments of cancer and hematological disorders. Indications. Side effects. Complications. Treatment. Demonstration of clinical department material. (Including the use of live video from clinical departments RNTSRR)	Interdisciplinary niche. Concept. Oncological alertness of a dentist, her species. The structure of the oncology service in Russia, the organization of care for patients with malignant tumors. Analysis of clinical cases requiring interdisciplinary training dentist.
Morphology - the basis for effective treatment.	
The practical part. Priboretenie skills and development of fence morphological material (scraping, imprint, puncture)	
Tumors maxillofacial: squamous cell carcinoma of the oral mucosa and oropharyngeal region. Factors contributing to the development of malignant tumors. Theory of tumors. Species. Demonstration of clinical cases in practice. (Including the use of live video from clinical departments RNTSRR)	Knowledge of morphology-baseeffective treatment. The practical part. The acquisition and development of skills fence morphological material (scraping, stamp, puncture). Indications. The role of the dentist in the initial diagnosis of oncological processes. Stomatoskopiya. Samples with dyes. Thermography, infrared scan. Ultrasound study. CT and MRI. Their role in the complex diagnosis of oncological processes. Biopsy, its species. Cytology. Histology.
Introduction to radiation therapy. History, biological basis, mechanisms of influence on the tumor. Features of preparation of the patient to conduct external beam radiotherapy. Modern technologies of external beam radiotherapy. Tumors of the head and neck, especially of teletherapy, side effects of dental pathology.	Squamous cell carcinoma of the oral mucosa and oropharyngeal region. Theory of tumors. Species. Demonstration of clinical cases. Vascular tumors of the face and jaws. Tumors of the salivary glands. Classification, clinical picture, diagnosis, differential diagnosis, treatments, prognosis. Osteoblastoklastoma jaws. Fibrous dysplasia of the jaws. Connective tissue tumors of the jaws and soft tissues of the face (lipoma, fibroma, osteoma). Classification, clinical picture, diagnosis, differential diagnosis, treatments, prognosis.

Long-term effects of external beam	Isolated and combined treatment of benign and
radiotherapy. Radionuclide therapy,	malignant tumors
mechanisms of influence on the tumor.	Chloe.
Radiation safety.	Side effects of treatment. Complications in cancer
Demonstration of clinical cases in practice.	patients in oral and maxillofacial area.
Radiation damage to the oral mucosa. Definition. Classification. emergence theory. Methods and approaches to treatment. Demonstration of clinical cases in practice	History, biological basis, mechanisms of influence on the tumor. Features of preparation of the patient to conduct external beam radiotherapy. Modern technologies of external beam radiotherapy. Types of radiation therapy. Brachytherapy, remote and interstitial therapy. Radionuclide therapy, mechanisms of influence on the tumor. Features of external beam radiation therapy, side effects, dental pathology. Long-term effects of external beam radiotherapy.
Osteomyelitis of the jaw bones of different	Definition. Classification. emergence theory. Methods
origin (radiotherapy, bisphosphonate,	and approaches to treatment complications in patients
dezomorfinovy).	receiving radiation and chemotherapy. Early and late
Clinical and radiological features	complications of radiation treatment. Osteoradionecrosis.
diagnostics.	

Developers:

Head of the Department of General and Clinical Dentistry, professor

Avanesov A.M.

Assistant of the Department of General and Clinical Dentistry

Gvozdikova E.N.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Physiotherapy of the dental diseases	
Discipline volume	2 CU (72 hours)	
The sum	The summary of the discipline	
Name of the discipline sections	The summary of discipline sections (subjects)	
(subjects)		
The theoretical basis of	The theoretical basis of physiotherapy,	
physiotherapy,	physioprophylaxis. Physiological mechanisms of	
physioprophylaxis. The	physical factors.	
organization of physiotherapeutic		
dental care.		
Galvanization, medicinal	The organization of physiotherapeutic dental care.	
electrophoresis and depophoresis	Documentation in the work of the physiotherapy	
in dentistry.	room. Fundamentals of safety.	
	The mechanism of physical and physiological	
	action of direct current, therapeutic effects in the	
	treatment of dental diseases. Galvanization,	
	medicinal electrophoresis in dentistry	
Pulsed low and medium	Depophoresis. Trans-channel DC current. The	
frequency currents and their use	method of conducting depophoresis.	
in dentistry.	and the comment of th	
High-frequency alternating	Pulsed low and medium frequency currents.	
current, electric and	Indications and contraindications for use in dental	
electromagnetic fields and their	practice. Electrical anesthesia	
application in dentistry.		
Phototherapy. Ultrasound	Electroodontodiagnostics, fluctuorization,	
therapy in dentistry.	amplipulse therapy. Techniques and methods of	
	conducting.	
Physical methods in the	High frequency alternating current, electrical and	
diagnosis and treatment of	electromagnetic fields, their application in	
diseases of hard tooth tissues.	dentistry	

Developers:

Professor of conservative dentistry department F.Yu. Daurova

Associate Professor of Conservative Dentistry department I.V. Bagdasarova

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Clinical dentistry
Volume discipline	4 CU (144 hr.)
Summary disciplines	
The section titles (the) discipline	Summary of sections (so) discipline:
Introduction to Clinical Dentistry.	Aims and objectives of the discipline "Clinical Dentistry". The role and place of a dentist in clinical medicine. oral manifestations in some common diseases (demonstration analysis and rare cases of clinical experience chair requiring general clinical training dentists). Algorithm Diagnostics and medzhdistsiplinarnogo interaction. Principles, especially the treatment. (Symptomatic and pathogenetic therapy)
Mistakes and complications in practice dentist general practice.	As nedopustit and how to fix it.
Physiological and pathophysiological basis of the microcirculation in the mouth.	Determination of the microcirculation. Types of microcirculatory disorders. Communication microcirculatory problems with oral mucosa and dental somatic pathology.
The manifestations of general diseases of the mouth.	Manifestations in the mouth of diabetes, hypertension, blood diseases and HIV infection.
Providing dental care to patients with cardiac disease.	Features a survey of cardiac patients. Clinical experience with the department. Long-term results of clinical observations observations.
Overview of modern means and methods of beam diagnostics of the head and neck.	The main objectives and principles of X-ray diagnostics in the mouth. Types ray studies (CT, MRI, PET, CT, Bone scan)
The role of the dentist in solving interdisciplinary problems.	Parsing complex clinical cases using tools and methods for telemedicine. Demonstration clinical department material. (Including a live broadcast of the clinical situations RNTSRR) Consultation on the preparation and protection of the course work.
Clinical simulation ambulatory situations requiring dental-surgery.	Clinical modeling application of composite materials for eliminating the defects of hard tissues of teeth of different origin. Clinical modeling restoring teeth with crowns, veneers and tabs. Demonstration of dental photographs on clinical examples from the professional experience of general practice dentist.
Clinical aspects of calcium metabolism in an organism. The role of calcium in the prevention of dental diseases.	Clinical aspects of calcium metabolism in an organism. The role of calcium in the prevention of dental diseases.
Clinical aspects of immunity in the oral	Clinical aspects of immunity in the oral cavity.

cavity. Protective barrnaya and function of	Protective barrier function of the oral mucosa.
the oral mucosa.	

Developers: Head of the Department of General and Clinical Dentistry, professor

Avanesov AM

Assistant of the Department of General and Clinical Dentistry

Gvozdikova EN

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Medical genetics in dentistry
The scope of the discipline	3 credits (108 acad. hour.)
•	Summary of the discipline
Name of sections (subjects) of discipline	Summary of sections (subjects) of discipline:
Heredity and Pathology.	Medical genetics in the structure of the biomedical sciences about man. Heredity and health. Mutations as the etiological factor of hereditary diseases. Classification of hereditary diseases. Heredity and pathogenesis. Heredity and clinical picture. Heredity and disease outcomes
Semiotics of hereditary pathology and principles of clinical diagnostics	General and private semiotics of hereditary pathology. Morphogenetic variants of development and their importance in the diagnosis of hereditary pathology. Anthropometry. Congenital malformations. Family approach in the diagnosis of hereditary pathology. Clinical and genealogical method for the diagnosis of hereditary diseases. Clinical features of the manifestation of hereditary diseases. Graphic image of the pedigree. Pedigree analysis. Genealogical analysis for monogenic diseases. Genealogical analysis in multifactorial diseases. Risk groups depending on the type of possible hereditary pathology
Chromosome abnormality	Classification of chromosomal diseases. Frequency, pathogenesis and clinical features of chromosomal diseases. Clinical characteristics of some chromosomal syndromes (trisomy syndromes, partial aneuploidy syndromes). Diseases with an unconventional type of inheritance. Diagnostic methods for chromosomal diseases. Treatment of chromosomal diseases
Monogenic disorders	Classification of monogenic diseases. Genetic heterogeneity and clinical polymorphism of monogenic diseases. Methods of laboratory diagnosis of monogenic pathology (biochemical methods, molecular genetic methods).
Multifactorial disorders	The most common nosological forms. General and private mechanisms for the implementation of hereditary predisposition. Factors and principles for identifying individuals at increased risk of developing diseases with a hereditary predisposition. Ecogenetic diseases
Congenital malformations of the maxillofacial area	General characteristics of the structure of the teeth. Genetic control of the normal development and formation of dental tissue. Genetic factors in the formation of tooth anomalies. Classification of anomalies of the development of teeth and the dentofacial region. Anomalies of the size and shape of teeth (macrodentia, microdentia, merged teeth, doubling, teeth invagination, abnormal tubercles and enamel pearls, taurodenism). Hereditary diseases and syndromes with anomalies of the size and shape of teeth. Anomalies of the number of teeth (teeth angenesis, complementary teeth). Hereditary disorders of the formation of the structure of teeth. Anomalies teething. Hereditary

	anomalies of malocclusion. Problems of genetic counseling and treatment of hereditary diseases in dentistry
Congenital and hereditary dental abnormality	Cleft lip and palate. The most common monogenic cleft lip and palate syndromes. Atypical crevices of the craniofacial region. Principles of treatment and rehabilitation of patients with congenital orofacial clefts. Problems of rehabilitation of patients with congenital orofacial clefts. Principles of prophylaxis of orofacial clefts
Dental disease multifactorial nature	Multifactorial defects of the craniofacial region and the dental-maxillary apparatus, syndromic formsCommon dental diseases of multifactorial nature (genetic aspects of caries, genetic aspects of periodontal diseases)
Prevention of congenital and hereditary dental abnormality	Medical genetic counseling. Methods of prenatal diagnosis of hereditary diseases. Methods for the detection of chromosomal abnormalities and monogenic diseases. Problems of genetic counseling and treatment of hereditary diseases in dentistry.
Heredity and Pathology.	Medical genetics in the structure of the biomedical sciences about man. Heredity and health. Mutations as the etiological factor of hereditary diseases. Classification of hereditary diseases. Heredity and pathogenesis. Heredity and clinical picture. Heredity and disease outcomes

Developers:

Associate Professor, the Department of Paediatric Dentistry and Orthodontics

A.E. Anurova

The Head of the department of Paediatric Dentistry and Orthodontics, professor

T. F. Kosyreva

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

The name of education program	Medical Rehabilitation
Duration of the discipline	2 CU (72 hours)
Brief description	` '
Name of the part of the discipline:	Brief contents
Organizational and methodological bases of rehabilitation	Definition of rehabilitation. The concepts of impairment, disability, social insufficiency. Types of rehabilitation, their goals and objectives. Medical rehabilitation. Abilitation. Rehabilitation program. Rehabilitation potential. Rehabilitation prognosis. Principles of the organization of the rehabilitation process. Stages of medical rehabilitation.
	Organizational approaches and staffing of the
Medical aspects of disability	rehabilitation process. Concepts disabled, disability. The concept of "disability". Primary, secondary, tertiary physical defects. Classification of disability. Disability groups. Features (risk groups) of persons with disabilities.
Means and methods of medical rehabilitation	Means of medical rehabilitation. Medicaments rehabilitation process. Means of psychological rehabilitation. Technical means of rehabilitation. Reconstructive surgery. Physiotherapy. The concept of physiotherapy. External physical factors applied in physiotherapy. Natural and preformed healing factors. The mechanism of therapeutic action of physiotherapy. General contraindications. Safety precautions when working in a physiotherapy department (office). Classification, types and forms of exercise therapy. Classification of motor modes. Features and evaluation of functional examination of patients before and after exercise therapy in different motor regimens. Ergotherapy (occupational therapy). Basics of medical massage. Basic tricks. Indications and contraindications. Basics of reflexology. The mechanism of therapeutic action. Methods of reflexology. Acupressure technique. Indications and contraindications.

Features of reflexology in the elderly, senile age and long-livers. The mechanism of therapeutic action and methods of hirudotherapy.

Indications, contraindications. Technique of hirudotherapy. Possible complications. The mechanism of therapeutic action of phytotherapy. Features of the method of herbal medicine. Indications. contraindications. The mechanism of therapeutic action of apitherapy. Indications, contraindications. The mechanism of therapeutic action of aromatherapy. Aromatherapy techniques. Indications, contraindications. Climatotherapy. Climatotherapy factors. Climates. Climatic resorts. Aerotherapy. The mechanism of therapeutic action of aerotherapy. Techniques. Heliotherapy. The mechanism of therapeutic action of heliotherapy. Forms of conducting sessions of heliotherapy. Indications, contraindications. Thalassotherapy. The mechanism of therapeutic action of thalassotherapy. The concept of "cold load". Indications, contraindications for thalassotherapy. Speleotherapy. Microclimatic features of natural caves, salt mines. The mechanism of therapeutic action speleotherapy. Indications, contraindications. Pelotherapy. Peloid classification. The mechanism of therapeutic action pelotherapy. Techniques. Indications, contraindications. Balneotherapy. Composition and classification of mineral waters. The mechanism of action of balneotherapy. Types of balneotherapy. Indications and contraindications. Rules of taking mineral waters.

Developers:

Professor of the Department of Anesthesiology and Resuscitation p. medical rehabilitation course, doctor of medical sciences

Zherov V.A.,

Associate Professor of the Department of Anesthesiology and Resuscitation p. the course of medical rehabilitation, Ph.D.

Zubarkina M.M.

Head of the Department of Anesthesiology and Resuscitation with a course of medical rehabilitation, Ph.D.

Petrova M.V.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of the discipline:	Biononorganic chemistry
Duration of teaching	4 CU (144 hours.)
Brief contents	of the discipline
The names of parts (topics) of the subject	Brief contents of the subject's parts (topics):
Introduction into bioinorganic chemistry	Notion of bioinorganic chemistry. Role of
	inorganic elements (metal cations) in the living
	processes.
Forms of existence of metal cations in living	Complex compounds. Composition, electronic
<u>organisms</u>	structure, nomenclature. Chemical reactions of
	complex compounds. Examples of important
	complex compounds: hemoglobin, chlorophyll,
	metal enzymes.
Features of transportation and storage of	So; uble and insoluble forms of biometals.
boimetals in living organisms	Stabilization of soluble forms by micelle
	formation. Notion of colloid solutions.
	Compposition and structure of the micelle. Ways
	of formation and physico chemical characteristics
TT: G	of colloid solutions.
pH influence on chemical reactions in living	Notion of pH. Change in pH in neutral, acidic and alkaline solutions. Buffer solutions. Mechanism of
organisms.	
	action and pH of buffer solutions of different composition. Buffer capacity. Buffer solutions in
	living organisms.
Redox processes in living systems	Notions of oxidation and reduction. Typical
icuox processes in fiving systems	oxidizing and reducing agents. Change in their
	oxidizing states. Ionic-electrone method in
	balancing of redox reactions. Redox reactions in
	living systems.
Qualitative and quantitative analysis of	Notion of qualitative analysis. Group and specific
biogenic elements	reactions. Quantitative titrimetric chemical
	analysis and its application in bioinorganic
	chemistry.

Developers:

Professor, Department of General Chemistry D.Sc. prof.

Kovalchukova O.V.

Head, Department of General Chemistry

D.Sc. prof. Davidov V.V.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of discipline	Adaptive physiology
Amount of discipline	4 CU (144 h)
	Summary of discipline
The name of the partition (s) discipline	Summary of sections (themes) discipline
Internal environment of the organism.	The internal environment of the organism. The value and composition of blood. The main physiological constants of blood, their dynamics in different age periods.
Age features of the circulatory system and respiration.	Age characteristics of the reaction of the cardiovascular system to physical activity. And changes in the frequency and depth of respiratory movements, lung capacity, minute breathing volume are features of breathing regulation at different ages.
Metabolism and energy	Age features of digestion and nutrition. Metabolism and energy - as the basis of vital activity of the organism. Dynamics of energy metabolism at different stages of ontogenesis.
Physiology of the nervous system and endocrine systems. Their age features	Age features of the functioning of the spinal cord and brain, as well as the autonomic nervous system. Endocrine system and its age features. The hypothalamic-pituitary system and its role in the regulation of the activity of the endocrine glands. The period of puberty and menopause.
Adaptation of a person to various environmental conditions.	General ideas about adaptation. The history of the development of ideas about adaptation. Types of adaptation: physiological (ontogenetic, phenotypic); evolutionary (genotypic, adaptive radiation). Types of reactions to external influences.
The doctrine of the general adaptation syndrome (Hans Selye).	Phases of physiological adaptation: urgent adaptation; transitional stage; long-term adaptation. Urgent (acute) adaptation and its mechanisms. Mobilization of systems responsible for adaptation to this factor. The occurrence of a non-specific reaction (stress syndrome). The role of activation of the pituitary-adrenal system, the effect of the release into the blood of catecholamines and corticosteroids on body functions.
The doctrine of functional systems (P.K. Anohin). The role of functional systems in adaptive responses.	The reaction of the organism to any environmental factor is provided not by separate organs, but by interconnected organ systems (functional systems of P.K. Anokhin). The reaction to any impact is realized by a functional system, whose work consists in exciting the nerve centers, mobilizing the cardio-respiratory system and skeletal muscles, increasing metabolism, etc.

Adaptive value of biorhythms.	Biorhythms as a result of evolutionary adaptation of living organisms to regular changes in geophysical conditions. Seasonal and circadian organization of body functions. Biorhythms of a healthy person. Biorhythm changes and diseases. The physiological basis of chronopharmacology and chronotherapy.
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Developers: Professor of the Department of normal physiology

A.E. Severin

Head of the Department of normal physiology, Professor

V.I. Torshin

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	Dental modeling of the shape of all groups of teeth
Scope of the discipline	4 CU (144 hours)
Summary of the discipline	
Name of sections (topics)	Summary of sections (topics) of the discipline:
of the discipline	
Dental Modeling	Anatomy of the teeth. Groups of teeth by function. Occlusion. Types and shape of dental arches. Principle of construction. The types of the ratio of dentition. Articulation (with a demonstration of the articulator), its effect on the ratio of dentition, and the anatomical shape of the teeth. Functional planes (Spee, Wilson). Types of restoration in dental practice, where you need to use modeling skills and knowledge of the anatomy of teeth and dentition. Rules and features of modeling the shape of the <i>central incison</i> of the <i>upper jaw</i> . Video demonstration. Modeling from sculptural plasticine. Rules and features of modeling the shape of the <i>lateral incison</i> of the <i>upper jaw</i> . Video demonstration. Modeling from sculptural plasticine. Rules and features of modeling the shape of the <i>lateral incison</i> of the <i>lower jaw</i> . Video demonstration. Modeling from sculptural plasticine. Rules and features of modeling the shape of the lateral incison of the <i>lower jaw</i> . Video demonstration. Modeling from sculptural plasticine. Rules and features of modeling the shape of the <i>canine</i> of the <i>upper jaw</i> . Video demonstration. Modeling from sculptural plasticine. Rules and features of modeling the shape of the <i>canine</i> of the <i>lower jaw</i> . Video demonstration. Modeling from sculptural plasticine. Rules and features of modeling the shape of the <i>first premolar</i> of the <i>upper jaw</i> . Video demonstration. Modeling from sculptural plasticine. Rules and features of modeling the shape of the <i>premolar</i> of the <i>upper jaw</i> . Video demonstration. Modeling from sculptural plasticine. Rules and features of modeling the shape of the <i>premolar</i> of the <i>upper jaw</i> . Video demonstration. Modeling from sculptural plasticine. Rules and features of modeling the shape of the <i>premolar</i> of the <i>upper jaw</i> . Video demonstration. Modeling from sculptural plasticine. Rules and features of modeling the shape of the <i>premolar</i> of the <i>lower jaw</i> . Video demonstration. Modeling from sculptural plasticine.

Rules and features of modeling the shape of the *first molar* of the *upper jaw*. Video demonstration. Modeling from sculptural plasticine.

Rules and features of modeling the shape of the 2^{nd} molar of the upper jaw. Video demonstration. Modeling from sculptural plasticine.

Rules and features of modeling the shape of the *first molar* of the *lower jaw*. Video demonstration. Modeling from sculptural plasticine.

Rules and features of modeling the shape of the 2nd molar of the *lower jaw*. Video demonstration. Modeling from sculptural plasticine.

Developers:

Prof., Head of department of Propaeduetics of Dental Diseases, PhD

S.N. Razumova

Assoc. Prof. Department of Propaedeutics of Dental Diseases, PhD

A.S. Brago

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Medical elementology	
Discipline volume	3 CU (108 hours)	
_	The summary of the discipline	
Name of the discipline sections (subjects)	The summary of discipline sections (subjects)	
Introduction to Medical Elementology	 Subject of medical elementology. Biological classification of chemical elements. Concept of bioelements. Biogeochemistry and factors affecting the elemental status of population. New paradigm of nutrition and therapy. 	
General Elementology	4. Factors affecting the homeostasis of microelements. Interaction between microelements5. Elemental status of a person. Personalized assessment of human elemental status.	
Particular Elementology	6. Elements-organogens (carbon, oxygen, nitrogen, hydrogen): role in the body; absorption; excretion; associated diseases; sources. 7. Macroelements (potassium, sodium, calcium, magnesium, phosphorus, sulfur, chlorine): role in the body; absorption; excretion; deficiency and excess; toxicity; associated diseases; sources. 8. Essential trace elements (iron, zinc, copper, manganese, chromium, cobalt, molybdenum, selenium, iodine): role in the body; absorption; excretion; deficiency and toxicity; associated diseases; sources. 9. Conditionally essential trace elements (lithium, strontium, vanadium, nickel, tin, silicon, fluorine): role in the body; absorption; excretion; deficiency and toxicity; associated diseases; sources. 10. Toxic and potentially toxic trace elements (arsenic, aluminum, lead, cadmium, mercury): role in the body; absorption; excretion; toxicity; associated diseases; sources.	
The role of chemical elements in dentistry	11. Imbalances of chemical elements for various diseases of the oral cavity: caries, pulpitis, periodontitis, gingivitis, periodontitis, periodontitis.	

Developers:

Assistant Professor of Department of Medical Elementology Yu.N. Lobanova

Head of the Department of Medical Elementology A.V. Skalny

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Bioelements in medicine	
Discipline volume	3 CU (108 hours)	
	The summary of the discipline	
Name of the discipline	The summary of discipline sections (subjects)	
sections (subjects)		
Introduction in the	1. Biological classification of chemical elements.	
bioelementology.	2. Introducing in the bioelementology.	
	3. Biogeochemistry and factors affecting the elemental status of the	
	population.	
	4. New paradigm of nutrition and pharmacology.	
General Elementology	5. Factors affecting the homeostasis of microelements. Interaction between	
	microelements	
	6. Elemental status of a person.	
	7. Personalized assessment of human elemental status.	
Particular	8. Macroelements (sulfur, potassium, sodium, calcium, magnesium,	
Elementology	phosphorus): role in the organism; suction; excretion; deficiency and toxicity;	
	associated diseases; sources.	
	9. Essential and relative essential trace elements (iron, zinc, copper,	
	manganese, chromium, cobalt, molybdenum, selenium, iodine, silicon,	
	vanadium): role in the organism; suction; excretion; deficiency and toxicity;	
	associated diseases; sources.	
	10. Toxic and potentially toxic trace elements (fluoride, nickel, arsenic,	
	lithium, tin, strontium, aluminum, lead, cadmium, mercury): role in the	
	organism; suction; excretion; toxicity; associated diseases; sources.	
The role of chemical	11. Imbalances of chemical elements for various diseases of the oral cavity:	
elements in dentistry	caries, pulpitis, periodontitis, gingivitis, periodontitis, periodontitis.	

Developers:

Senior lector of Department of Medical Elementology Yu.N. Lobanova

Head of the Department of Medical Elementology A.V. Skalny

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of discipline	3D-technology in dentistry
Discipline volume	3 CU (108 hours)
The summa	ry of the discipline
Name of the discipline	The summary of discipline sections
sections (subjects)	(subjects)
Radiation examination methods in dentistry. Indications. Side effect. Complications. Intraoral and extraoral radiography of teeth. Cone - beam computed tomography in the practice of a dentist demonstration of the clinical material of the Department.	Discovery of x-rays. The main types of radiation examination in dentistry. Principles of image acquisition during intraoral radiography, orthopantomography, cone-beam and spiral computed tomography. Analysis of the rules for positioning the patient during a particular study. Disadvantages and advantages of the methods. The concepts of pixel, voxel, Hounsfield scale,
Practical part. Learning the positioning of the patient during the radiation survey.	dicom.
Radiation safety of the dentist during radiation examination. Computer tomography artifacts and ways to solve them.	SanPiN standards, recommendations for conducting radiation examination methods for children, pregnant women and other groups of people. Employees of group A and group B. Radiation load for one study for each method.
Practical part. Training in radiation protection equipment. Work with CT scans to eliminate metal artifacts.	Errors of two-dimensional and three-dimensional methods diagnostics. What is an artifact, types of artifacts, and tools to eliminate artifacts.
X-ray anatomy of the maxillofacial region according to cone-beam computed tomography.	Important structures of the upper and lower jaw according to computed tomography. Their definition, localization, and features. Study of the structure of the paranasal sinuses,
Practical part. Working with computed tomography for the ability to visualize the main anatomical structures when treatment planning.	TMJ, mandibular canal, incisor canal, alveolo- antral artery. Determination of the anatomical structure of the tooth, features of the canal-root system of the tooth and its visualizations on CBT.
X-ray semiotics of major dental diseases at a dental appointment.	Diagnosis of caries according to CBCT data. Non- carious lesions of hard tissues of teeth. Dental abnormalities. Periodontitis and its radiological
Practical part. Working with computed tomography to analyze the scanning area to detect pathological formations.	picture. Parodontium. The structure of the periodontium. Periodontal imaging and evaluation based on cone-beam computed tomography.

X-ray semiotics of major dental	The retention and dystopia of the teeth. Anomalies in
diseases at a dental appointment.	the development of teeth and jaws. Neokonchennyi
	and odontogenic cysts. Diagnostics based on
Practical part. Work with computed	computed tomography data. Assessment of the level
tomography to analyze the scanning	of prevalence. Planning of dental implantation based
area to detect pathological formations.	on radiological examination data.
Working with cone - beam computed	Practice manual skills when it is possible to obtain a
tomography viewer programs for	diagnostic image of the tooth, jaw, or anatomical
analyzing a pathological condition.	structure.
	Performing linear measurements. Setting the image
Practical part. Mastering the skills of	viewing mode. Building a panoramic sonogramme
working with programs to get the	and visualization lateral cross-sections. Ability to
maximum information for diagnosis	work in 3D mode.
and treatment.	

Developers:

Assistant of the Department of General and clinical medicine dentistry

Sedov Yu. G.

Assistant of the Department of General and clinical medicine dentistry

Gvozdikova E. N.

Head of the Department of General and clinical medicine of dentistry, MD, Professor

Avanesov M. A.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Name of the discipline	CAD/CAM technologies in dentistry
Volume discipline	3 CU (108 hr.)
Sun	nmary disciplines
The section titles (the) discipline	Summary of sections (so) discipline:
Introductory lesson. The concept of CAD / CAM system. The history of the development of CAD / CAM systems in dentistry. Structure CAD \ CAM systems.	The concept CAD / CAM sistema.Istoriya development of CAD / CAM systems in Russia and mire.Istorichesky essay on the development of the company Sirona. General characteristics and review of existing CAD / CAM systems in the world. Principles and stages of work CAD / CAM systems. Compare CAD-CAM systems for laboratory fabrication of structures and cabinet systems Systems of open and closed. The materials of construction
Dissection teeth under orthopedic structures made by milling	Recovery Methods dentition hard tissue defects. Classification of cavities by Black localization, classification ADO tabs. Formation of cavities, walls, occlusal edges. Preparation under inley / onlay / overlay inlays, crowns.
Getting the optical impression	The concept of "optical impression". Overview 3Dskanerov and intra-oral camera in prosthetic dentistry. Prepare to receive the impression, the basic requirements. matting errors. Stages optical impression removal, obtaining the medial / distal enlarged impression. Quality control of the optical impression. Typical errors when removing optical impression.
Working with the CAD	The main program for example, the company Sirona. Familiarization with the CEREC system user interface (menu: configuration, settings, tools, configuration, calibration). Screen toolbar (input administrative data ekvatornaya line, a line of preparation, interproximal contacts, to construct models of instruments). Construction crown via buccal picture and the Registrar of occlusion. Registrar of the central occlusion. Choice of dental tooth library.
Work program CERECSW 4	Construction onlay / inlay tabs, overlay, a single crown. Working with the milling program (milling otmodelirovannyh earlier designs).
Materials for milling prosthetic	Classification of materials for the manufacture of orthopedic structures. Features and indications. Blocks for aesthetic dentistry characteristics during milling.

Methods of processing orthopedic structures after milling	Sintering. Optimalnye modes. Vliyanie parameters on accuracy, durability, aesthetics of future work. Polishing or glazing restorations. Individualization ceramic restorations using ceramic materials and paints.
Fixing restorations	Adhesive cementation of restorations. Dual-cure cements. Representatives, their properties and differences. Stages fixing various ceramic restorations
Digital Opportunities	Additional features digital-gingival production of prostheses, protective guides for templates preparation teeth individual spoons.

Developers:

Head of the Department of General and Clinical Dentistry, professor

Avanesov A.M.

Assistant of the Department of General and Clinical Dentistry

Gvozdikova E.N.

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Modern endodontics	
The amount of discipline	2 Credits (72 hours)	
Discipline summary		
Name of sections (topics) of the discipline	Summary of sections (topics) of the discipline:	
Etiology, pathogenesis of tooth pulp	Etiology, pathogenesis, clinic, diagnosis,	
inflammation. Classification of pulp diseases.	differential diagnosis, treatment, prevention	
	Etiology, pathogenesis of pulpitis.	
	Classification of pulpitis.	
Clinic, diagnosis, differential diagnosis of acute	Acute pulpitis. Clinic, diagnosis, differential	
pulpitis.	diagnosis, treatment.	
Clinic, diagnosis, differential diagnosis of chronic	Chronic pulpitis. Clinic, diagnostics, differential	
pulpitis	diagnostics.	
Pulpitis Treatment Methods	Pulpitis treatment techniques preserving pulp	
	viability: biological method, vital amputation.	
	Indications and contraindications	
	Pulpitis treatment methods that do not preserve	
	pulp viability.	
	Devital extirpation of pulp. Indications	
	Vital extirpation of pulp.	
	Endodontics	
Etiology, pathogenesis of inflammation of the	Anatomical and physiological features of	
apical periodontium.	periodontium. Etiology, pathogenesis of apical	
	periodontitis.	
	Classification of periodontitis ICD-10	

Developers:

Professor of conservative dentistry department F.Yu. Daurova

Associate Professor of Conservative Dentistry department I.V. Bagdasarova

Medical institute

ANNOTATION OF ACADEMIC DISCIPLINE

Educational program 31.05.03 Dentistry

Name of discipline	Aesthetic restoration
The amount of discipline	2 Credits (72 hours)
Discipline summary	
Name of sections (topics)	Summary of sections (topics) of the
of the discipline	discipline:
Composition, properties and classification of modern light-cured composite materials	The purpose of the stages of finishing the restoration with Adhesive systems. Mechanism of adhesion of composites to enamel and dentin. Methods of isolation of the working field in dentistry.
Features of aesthetic modeling of the lateral group of teeth upper and lower jaws	Anatomical features of the lateral group of teeth of the upper and lower jaws. Tactics. Use tools.
Stages of aesthetic modeling of the frontal group of teeth	Anatomical features of the frontal group of teeth. Tactics. Use tools.
Contact point	Stages of formation in different groups of teeth. Auxiliary devices used to restore the contact point.
The purpose of the stages of finishing the restoration	Materials and tools used at each stage. Features of finishing treatment of various restoration surfaces (cervical, vestibular, oral, proximal). Quality criterion.

Developers:

Professor of conservative dentistry department F.Yu. Daurova

Associate Professor of Conservative Dentistry department I.V. Bagdasarova

Head of Program

S.N. Razumova