

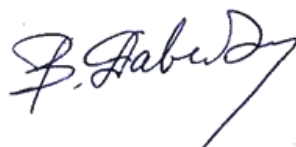
**Plan of lectures and classes in the academic discipline “Medical Biology and General Genetics”
for the students studying General Medicine**

№	Lectures	Lecturer	#	Topic
<i>First semester</i>				
1.	Flow of genetic information in the cell	Eugene Chernous	1.	The role of biology in medical education. Subject matter, tasks and methods of cytology.
2.	Gene expression. Epigenetics	Albina Podberezkina	2.	Flow of substance and energy through the cell. The structure of the cell.
3.	Genetic engineering	Julia Korbut	3.	Organization of hereditary material.
4.	Postgenomic medicine	Victor Grigorovich	4.	The flow of genetic information in cell I. Cell cycle
5.	Mutagenesis. Carcinogenesis (self-study)	Eugene Chernous	5.	The flow of genetic information in cell I. The Central Dogma of Molecular Biology.
6.	Human genetics (self-study)	Eugene Chernous	6.	Regulation of gene expression in prokaryotes and eukaryotes
			7.	Genomics. Methods of DNA analysis.
			8.	Genetic engineering.
			9.	Genomics. Methods of DNA analysis. Omic technologies in science and medicine.
			10.	Colloquium in molecular biology.
			11.	The laws of inheritance. Interactions of genes.
			12.	Biology and genetics of sex. Genetic linkage.
			13.	Variability. Mutagenesis. Carcinogenesis.
			14.	Population-species level of organization of life. Genetics of populations.
			15.	Human genetics.
			16.	Hereditary diseases.
			17.	Medical genetic consultation. Prenatal diagnostics.
			18.	Final session on molecular biology and genetics
<i>Second semester</i>				
5.	Ecological parasitology	Eugene Chernous	1 (19)	General parasitology.
6.	Congenital malformations in the context of the evolution of organ systems	Albina Podberezkina	2 (20)	Medical Protistology I. Phylum Apicomplexa, class Sporozoa.
7.	Biological aspects of homeostasis and chronobiology	Julia Korbut	3 (21)	Medical Protistology II. Phylum Sarcomastigophora, class Sarcodina, class Zoomastigota. Phylum Infusoria, class Ciliata.
8.	Evolution of organ system	Victor Grigorovich	4 (22)	Medical helminthology I. Phylum Plathelminthes, class Trematoda.
			5 (23)	Medical Helminthology II. Phylum Plathelminthes, class Cestoda.
			6 (24)	Medical helminthology III. Phylum Nemathelminthes, class Nematoda 1.
			7 (25)	Medical helminthology IV. Phylum Nemathelminthes, class Nematoda 2.
			8 (26)	Medical Arachnoentomology I. Phylum Arthropoda, class Arachnida.
			9 (27)	Medical Arachnoentomology II. Phylum Arthropoda, class Insecta 1.
			10(28)	Medical Arachnoentomology III. Phylum Arthropoda, class Insecta 2.
			11(29)	Colloquium in micropreparations of parasites.
			12(30)	Final session on parasitology.
			13(31)	Poisonous organisms
			14(32)	Reproduction of human and other mammals.
			15(33)	Basic regularities of ontogenesis in humans and other mammals (prenatal period).
			16(34)	Basic regularities of ontogenesis in humans and other mammals (postnatal period).
			17(35)	Regeneration and transplantation

**Plan of lectures and classes in the academic discipline
“Medical Biology and General Genetics”
for the students studying Dentistry**

№	Lectures	Lecturer	#	Topic
<i>First semester</i>				
1.	The flow of genetic information through the cell	Eugene Chernous	1.	The role of biology in medical education. Subject matter, tasks and methods of cytology.
2.	Gene expression. Epigenetics	Albina Podberezkina	2.	Flow of substance and energy through the cell. The structure of the cell.
3.	Mutagenesis. Carcinogenesis (self-study)	Julia Korbut	3.	Organization of hereditary material.
4.	Regeneration and transplantation	Victor Grigorovich	4.	The flow of genetic information in cell I. Cell cycle
5.	Congenital malformations in the context of the evolution of organ systems (self-study)	Victor Grigorovich	5.	The flow of genetic information in cell I. The Central Dogma of Molecular Biology.
6.	Poisonous and venomous animals	Eugene Chernous	6.	Regulation of gene expression in prokaryotes and eukaryotes
			7.	Genetic engineering. Methods of DNA analysis.
			8.	Genetic engineering. Transgenesis.
			9.	The laws of inheritance. Interactions of genes.
			10.	The laws of inheritance. Interactions of genes. Biology and genetics of sex. Genetic linkage.
			11.	Variability. Mutagenesis. Carcinogenesis.
			12.	Population-species level of organization of life. Genetics of populations.
			13.	Human genetics.
			14.	Colloquium in molecular biology and genetics.
			15.	Reproduction of human and other mammals.
			16.	Basic regularities of ontogenesis in humans and other mammals (
			17.	General parasitology.
			18.	Medical parasitology I.
			19.	Medical parasitology II.

Head of the Department of Biology

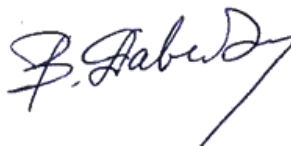


V.V. Davydov

**Plan of lectures and classes in the academic discipline “Biology”
for the students studying Pharmacy**

№	Lectures	Lecturer	#	Topic
1.	Flow of substance and energy through the cell. The structure of the cell.	Eugene Chernous	1.	The role of biology in medical education. Subject matter, tasks and methods of cytology.
2.	The flow of genetic information in cell I	Albina Podberezkina	2.	Flow of substance and energy through the cell. The structure of the cell.
3.	Gene expression. Epigenetics	Julia Korbut	3.	Organization of hereditary material.
4.	Genetic engineering	Victor Grigorovich	4.	The flow of genetic information in cell I. Cell cycle
5.	Postgenomic medicine	Victor Grigorovic	5.	The flow of genetic information in cell I. The Central Dogma of Molecular Biology.
6.	Mutagenesis. DNA repair	Eugene Chernous	6.	Regulation of gene expression in prokaryotes and eukaryotes
7.	Reproduction of human	Eugene Chernous	7.	Genetic engineering. Methods of DNA analysis.
8.	Ecological parasitology	Albina Podberezkina	8.	Genetic engineering. Transgenesis.
			9.	The laws of inheritance. Interactions of genes.
			10.	The laws of inheritance. Interactions of genes. Biology and genetics of sex. Genetic linkage.
			11.	Variability. Mutagenesis. Carcinogenesis.
			12.	Population-species level of organization of life. Genetics of populations.
			13.	Human genetics
			14.	Reproduction of human and other mammals

Head of the Department of Biology



V.V. Davydov