

Approved at the methodic meeting
of the Department of Propaedeutic Pediatrics and Medical Genetics
on the August, 30, 2023 (Minutes No 1)

**MEDICAL GENETICS
(CURRICULUM)
(Medical Faculty, the 3rd Year of Study, 2023-2024)**

Lectures: 6 hours
Practice: 16 hours
Self-works: 23 hours
Total: 45 hours

Lecture Curriculum

No	Topic	Hours
<i>Part 4. Monogenic diseases</i>		
1	General characteristics of monogenic pathology. Genetics and clinical manifestation of some monogenic diseases.	2
<i>Part 5. Chromosomal diseases</i>		
2.	General characteristics of chromosomal diseases. Genetics and clinical manifestation of some chromosomal diseases	2
<i>Part 8. Medical and genetic counselling, prevention of hereditary pathology. Basic principles of treatment of hereditary diseases</i>		
3.	Medical and genetic counselling. Prenatal diagnostics. Screening programs. Basic principles of treatment of hereditary diseases	2
	<i>TOTAL for discipline</i>	6

Practice Curriculum

No	Topic	Hours
<i>Part 1. Heredity and pathology. The role of heredity in human pathology</i>		
1.	Subject and tasks of medical genetics. The role of heredity in human pathology.	2
<i>Part 2. Methods of the Medical Genetics</i>		
2.	Clinical and genealogical methods. Cytogenetic and molecular genetic methods. Biochemical methods.	2
<i>Part 3. Propaedeutic of hereditary diseases</i>		
3.	Semiotics of hereditary diseases. Peculiarities of manifestation of hereditary diseases. Morphogenetic developmental options. Malformations.	2
<i>Part 4. Monogenic diseases</i>		
4.	General characteristics of monogenic pathology. Genetics and clinical manifestation of some syndromes.	2
<i>Part 5. Chromosomal diseases</i>		
5.	Overview of chromosomal diseases. Genetics and clinical manifestation of some syndromes.	2
<i>Part 6. Hereditary metabolic diseases</i>		
6.	General characteristics of hereditary metabolic diseases. Lysosomal storage diseases General characteristics of mitochondrial pathology.	2
<i>Part 7. Diseases with hereditary predisposition</i>		
7.	Overview of multifactorial diseases. Determination of genetic predisposition. Measures of prevention.	2
<i>Part 8. Medical and genetic counselling, prevention of hereditary pathology. Basic principles of treatment of hereditary diseases</i>		
8.	Programs of preconception prevention and prenatal diagnostics and neonatal screening programs. Basic principles of treatment of hereditary diseases.	2
	<i>TOTAL for discipline</i>	16

Curriculum of Self-works

No	Topic	Hours	Type of control
<i>Part 1. Heredity and pathology. The role of heredity in human pathology</i>			
1.	The role of heredity in human pathology	1	During classes
<i>Part 2. Methods of the Medical Genetics</i>			
1.	Methods of medical genetics: clinical and genealogical methods, cytogenetic and molecular genetic methods, biochemical methods.	2	During classes
<i>Part 3. Propaedeutic of hereditary diseases</i>			
1.1	Morphogenetic developmental options. Malformations.	2	During classes
<i>Part 4. Monogenic diseases</i>			
1.	Genetics and clinical manifestation of some monogenic diseases.	2	During classes
2.	Hereditary renal disease	2	
3.	Systemic skeletal dysplasia	2	
<i>Part 5. Chromosomal diseases</i>			
1.	Clinical manifestation of main chromosomal diseases.	2	During classes
<i>Part 6. Hereditary metabolic diseases</i>			
1.	Hereditary metabolic diseases: principles of treatment, rehabilitation and social adaptation	2	
2.	General characteristics of mitochondrial diseases. Clinical manifestation, diagnosis, treatment.	2	During classes
<i>Part 7. Diseases with hereditary predisposition</i>			
1.	Determination of genetic predisposition. Measures of prevention of multifactorial diseases.	2	During classes
2.	Fundamentals of ecological genetics, pharmacogenetics	2	
<i>Part 8. Medical and genetic counselling, prevention of hereditary pathology. Basic principles of treatment of hereditary diseases.</i>			
1.	Medical and genetic counselling. Prenatal diagnostics. Screening programs.	2	During classes
	<i>TOTAL for discipline</i>	23	

Head of the Department of Propaedeutic Pediatrics
and Medical Genetics, Professor, MD

_____ Olena LYCHKOVSKA