

COURSE DESCRIPTOR

| № | Topic | Total, hours | Lectures, hours | Workshops (seminars), hours | Labs, hours | Self-study of the material, hours | Individual tasks, hours |
|---|--|--------------|-----------------|-----------------------------|-------------|-----------------------------------|-------------------------|
| full-time course form of study | | | | | | | |
| Module 1. Syndromological analysis | | | | | | | |
| 1 | Methodology of examination of a patient with suspected hereditary pathology. Phenotypical analysis of proband and its family members | 8 | 0 | 2 | 0 | 6 | 0 |
| 2 | Clinical-genealogical analysis | 8 | 0 | 2 | 0 | 6 | 0 |
| 3 | Making of pedigree. Work with diagnostic catalogs. | 10 | 0 | 2 | 0 | 8 | 0 |
| 4 | Syndromological analysis | 8 | 0 | 2 | 0 | 6 | 0 |
| Module 2. Cytogenetic methods of diagnosis of congenital and hereditary pathology | | | | | | | |
| 1 | Cytogenetic methods of diagnosis in clinics | 8 | 0 | 2 | 0 | 6 | 0 |
| 2 | Chromosomal abnormalities (numerical, structural). | 10 | 0 | 2 | 0 | 8 | 0 |
| 3 | Chromosomal polymorphism, chromosomal instability, gonadal mosaicism, single parent disomy | 8 | 0 | 2 | 0 | 6 | 0 |
| Module 3. Biochemical methods of diagnosis of congenital and hereditary pathology | | | | | | | |
| 1 | Diagnosis of hereditary metabolic diseases | 10 | 0 | 2 | 0 | 8 | 0 |
| 2 | Mass screening in the early diagnosis of hereditary pathology. | 10 | 0 | 2 | 0 | 8 | 0 |
| 3 | Selective screening programs in diagnosis of hereditary metabolic disorders. | 10 | 0 | 2 | 0 | 8 | 0 |
| Module 4. Molecular genetic methods of diagnosis of hereditary pathology | | | | | | | |
| 1 | Modern methods of DNA diagnosis of hereditary pathology. | 10 | 0 | 2 | 0 | 8 | 0 |
| 2 | DNA diagnosis of monogenic and infectious diseases. | 8 | 0 | 2 | 0 | 6 | 0 |
| Module 5. Prenatal diagnosis of congenital and hereditary pathology | | | | | | | |
| 1 | Methods of prenatal diagnosis. | 8 | 0 | 2 | 0 | 6 | 0 |
| 2 | Prenatal ultrasound diagnosis of congenital malformations | 8 | 0 | 2 | 0 | 6 | 0 |

| № | Topic | Total, hours | Lectures, hours | Workshops (seminars), hours | Labs, hours | Self-study of the material, hours | Individual tasks, hours |
|---|--|--------------|-----------------|-----------------------------|-------------|-----------------------------------|-------------------------|
| 3 | Biochemical screening programs | 8 | 0 | 2 | 0 | 6 | 0 |
| 4 | Invasive methods of prenatal diagnosis. General characteristics. indications and contraindications | 8 | 0 | 2 | 0 | 6 | 0 |
| 5 | Methodology of conducting invasive prenatal research methods | 10 | 0 | 4 | 0 | 6 | 0 |
| <i>Total (full-time course form of study)</i> | | <i>150</i> | <i>0</i> | <i>36</i> | <i>0</i> | <i>114</i> | <i>0</i> |
| part-time course form of study | | | | | | | |
| Module 1. Syndromological analysis | | | | | | | |
| 1 | Methodology of examination of a patient with suspected hereditary pathology. Phenotypical analysis of proband and its family members | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | Clinical-genealogical analysis | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | Making of pedigree. Work with diagnostic catalogs. | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | Syndromological analysis | 0 | 0 | 0 | 0 | 0 | 0 |
| Module 2. Cytogenetic methods of diagnosis of congenital and hereditary pathology | | | | | | | |
| 1 | Cytogenetic methods of diagnosis in clinics | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | Chromosomal abnormalities (numerical, structural). | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | Chromosomal polymorphism, chromosomal instability, gonadal mosaicism, single parent disomy | 0 | 0 | 0 | 0 | 0 | 0 |
| Module 3. Biochemical methods of diagnosis of congenital and hereditary pathology | | | | | | | |
| 1 | Diagnosis of hereditary metabolic diseases | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | Mass screening in the early diagnosis of hereditary pathology. | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | Selective screening programs in diagnosis of hereditary metabolic disorders. | 0 | 0 | 0 | 0 | 0 | 0 |
| Module 4. Molecular genetic methods of diagnosis of hereditary pathology | | | | | | | |
| 1 | Modern methods of DNA diagnosis of hereditary pathology. | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | DNA diagnosis of monogenic and infectious diseases. | 0 | 0 | 0 | 0 | 0 | 0 |

| № | Topic | Total, hours | Lectures, hours | Workshops (seminars), hours | Labs, hours | Self-study of the material, hours | Individual tasks, hours |
|---|--|--------------|-----------------|-----------------------------|-------------|-----------------------------------|-------------------------|
| Module 5. Prenatal diagnosis of congenital and hereditary pathology | | | | | | | |
| 1 | Methods of prenatal diagnosis. | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | Prenatal ultrasound diagnosis of congenital malformations | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | Biochemical screening programs | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | Invasive methods of prenatal diagnosis. General characteristics. indications and contraindications | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | Methodology of conducting invasive prenatal research methods | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>Total (part-time course form of study)</i> | | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> |