Lectures (20 hours)


Practice (22 hours)
1. Physical examination of the new born for finding any apparent malformations
2. Checking the permeability of the digestive tube at birth
3. Sectioning the lingual frenule
4. Transport conditions and necessary care during transport for the patient with esophageal atresia or neonatal to the pediatric center
5. Pleural punction and pleurotomia on Pezzer’s sonde
6. Palpating the pyloric olive
7. Discovering an abdominal tumor
8. Physical signs of appendicitis in the grown child
9. Nursing maneuver at new borns and suckling babies with congenital megacolon
10. Value of rectal tushe in finding surgical afflictions in children
11. Reduction and provisory fixation of anal mucus prolaps
12. Taxis maneuver for reduction and maintaining inguinal hernia or inguinal-scrot strangulation
13. Paraphimosis reduction
14. Bladder sounder
15. Examining inguinal-scrot area to establish testicles’ presence
16. Rachidian punction
17. Articular punction
18. Reduction of the painful pronation
19. Taking care of children immobilized in plaster corset
20. Treatment of obstetric fractures of clavicule and femur
21. Immobilizing children’s fractures
22. Ortolani maneuver and Barlow test for finding luxant malformation of the hip in neonatal period.
23. Clinical symptomology of congenital hip luxation at suckling babies and toddlers
25. Correction maneuvers and fixating adhesive band on congenital uneven equino-varus leg.
Subject: Internal Medicine – Diabetes, Metabolism and Nutrition Diseases

MG5.1.1 Internal Medicine – Diabetes, Metabolism and Nutrition Diseases

Cours (12 hours)

1. Diabetes mellitus:
   i. definition
   ii. the grounds of the clinical diagnosis
   iii. the lab diagnosis criteria (genetic, immunologic, biochemical markers)

2. Classification

3. Type 1 diabetes mellitus (etiopathogeny, physiopathology, symptoms, natural history)

4. Type 2 diabetes mellitus (etiopathogeny, physiopathology, symptoms, natural history)

5. The criteria of a good metabolic control

6. The management of diabetes mellitus (the role of the doctor, the role of the patient, the genetic advice)

7. Diet and physical exercise

8. Type 1 diabetes mellitus treatment (therapeutic means, methods, practical strategies, side effects)

9. Type 2 diabetes mellitus treatment (oral anti-diabetes medication, action mechanisms, therapeutic strategies, insulinotherapy in type 2 diabetes mellitus)

10. Special situations: pregnancy and diabetes mellitus, surgical interventions and diabetes mellitus

11. Acute complications of diabetes mellitus:
   i. hypoglycemia in the diabetic patient (physiopathology diagnosis, treatment)
   ii. diabetes ketosis and keto acidosis (physiopathology diagnosis, treatment)
   iii. hyperosmolar hypoglycemic coma (physiopathology diagnosis, treatment)
   iv. the therapy approach of other emergencies of the diabetic patient (infections, alcoholic keto acidosis, lactic acidosis)

11. Chronic complications of diabetes mellitus:
   i. mechanisms
   ii. diagnosis criteria for:
1. diabetic microangiopathy (diabetic nephropathy, diabetic retinopathy)
2. diabetic macroangiopathy (particularities)
3. diabetic (peripheral and vegetative) neuropathy, the management of diabetes mellitus chronic complications

12. Obesity:
   i. evaluation of the weight status
   ii. obesity classification
   iii. obesity complications
   iv. obesity treatment

13. Dyslipidemias:
   i. definition and classification
   ii. clinical and paraclinical diagnosis
   iii. screening and treatment

14. The metabolic syndrome X:
   i. physiopathology
   ii. diagnosis criteria
   iii. therapeutical approach

**Practical activities (30 hours)**

1. Practical modalities of integrating the diabetes mellitus diagnosis
2. The clinical exam of the diabetic patient
3. The value and interpretation of the lab parameters
4. The clinical management of diabetes mellitus: objectives and general strategy
5. The management of hyperglycemia:
   i. optimizing the life style; strategies of elaborating the diet for the diabetic patients
   ii. insulinotherapy: commercial products, the technique of insulin administration, therapeutic strategies, indications, contraindications, side effects; clinical cases
   iii. oral anti diabetes medication: the principles of oral therapy, types of oral medication, indications, contraindications, administering methods, medication interferences, side effects; clinical cases
   iv. estimation of therapy efficiency
   v. specific education in diabetes mellitus
6. The management of diabetes mellitus in elderly patients, children and teenagers; diabetes and pregnancy, the surgery patient
7. The diabetic ketosis and keto acidosis diagnosis
8. The dianosis of hypoglycemy in the diabetic patient
9. The management of acute complications of diabetes mellitus; clinical cases
10. The diagnosis of diabetic microangiopathy
11. The diagnosis of diabetic macroangiopathy; estimarea riscului cardiovascular
12. High blood pressure of the diabetic patient
13. The diagnosis of peripheric neuropathy; the diabetic leg
14. The diagnosis of autonomous neuropathy
15. The managementul of chronic complications of diabetes mellitus; clinical cases
16. The managementul of comorbidity of diabetes mellitus; clinical cases
17. Diagnosis and treatment of obesity ad its complications
18. Diagnosis and treatment of dislipidemias
19. Diagnosis and treatment of the metabolic syndrome.
Subject Internal Medicine – Digestive

MG5.1.1 Internal Medicine – Digestive

Lectures (36 hours)

1. Introduction
   - The patient with digestive disorders
   - Peculiarities of paraclinical investigations in gastroenterology

2. Pathology of the esophagus
   - Gastroesophageal reflux disease
   - Esophageal motor disorders
   - Esophageal cancer

3. Pathology of the stomach and the duodenum
   - Dispeptic syndrome. Gastritis
   - Gastric and duodenal ulcer
   - Gastric cancer
   - The operated stomach

4. Pathology and exploration of the small intestine
   - Diarrheic syndrome
   - Malabsorption syndrome
   - Celiac disease
   - Benign and malignant tumors

5. Intestinal inflammatory diseases

6. Rectocolonic pathology
   - Irritable bowel syndrome
   - Diversticulosis
   - Hemmoroids as a disease
   - Motor disorders

7. Benign and malignant tumors of the colon

8. Pancreas pathology
   - Acute pancreatitis
   - Chronic pancreatitis
   - Pancreatic cancer

10. Chronic viral hepatitis
11. Chronic hepatitis
   - Alcoholic
   - Autoimmune
   - Genetic-metabolic
   - Medicamentous
   - Non-alcoholic steatohepatitis
12. Hepatic cirrhosis
13. Benign and malignant hepatic tumors
14. Superior and inferior digestive hemorrhage
15. Pathology of the biliary bladder

Practice (90 hours)
1. The patient with digestive symptoms (2 hours)
2. Peculiarities of the paraclinical investigations in gastroenterology (2 hours)
3. Esophagus pathology. Gastroesophageal reflux disease (2 hours)
4. Esophagus pathology. Esophageal motor disorders (2 hours)
5. Esophagus pathology. Esophageal cancer (2 hours)
6. Pathology of the stomach and the duodenum. Gastric ulcer (2 hours)
7. Pathology of the stomach and the duodenum. Duodenal ulcer (2 hours)
8. Pathology of the stomach and the duodenum. Gastric cancer (2 hours)
9. Pathology of the small intestine. Malabsorption syndrome (2 hours)
10. Pathology of the small intestine. Celiac disease (2 hours)
11. Pathology of the small intestine. Benign and malignant tumors (2 hours)
12. Intestinal inflammatory diseases. Ulcer hemorrhagic rectocolitis (2 hours)
13. Intestinal inflammatory diseases. Chron disease (2 hours)
14. Rectocolonic pathology. Irritable bowel syndrome (2 hours)
15. Rectocolonic pathology. Diverticulosis (2 hours)
16. Rectocolonic pathology. Hemmoroids as a disease (2 hours)
17. Rectocolonic pathology. Motor disorders (2 hours)
18. Benign tumors of the colon (2 hours)
19. Malignant tumors of the colon (4 hours)
20. Pancreas pathology. Acute pancreatitis (2 hours)
21. Pancreas pathology. Chronic pancreatitis (2 hours)
22. Pancreas pathology. Pancreatic cancer (2 hours)
23. Chronic viral hepatitis (4 hours)
24. Chronic alcoholic hepatitis (2 hours)
25. Chronic autoimmune hepatitis (2 hours)
26. Chronic genetic-metabolic hepatitis (1 hours)
27. Hepatic cirrhosis (6 hours)
28. Benign and malignant hepatic tumors (4 hours)
29. Superior and inferior digestive hemorrhage. Icterus (4 hours)
30. Pathology of the perineum (2 hours)
31. Pathology of the biliary bladder (4 hours)
Subject Internal Medicine – Geriatrics
MG5.1.1 Internal Medicine – Geriatrics

Lectures (6 hours)
1. Evaluating the elderly patient
2. Normal aging of the cardio-vascular system
3. Peculiarities of diseases of the old cardio-vascular system: cardiac insufficiency, HTA, pectoral angina, miocardic infarct, rhythm disorders, aortic stenosa, peripheric vascular diseases

Practice (15 hours)
1. Peculiarities of anamnesis and objective exam of the elderly
2. Diet principles, peculiarities of alimentary diets recommended for the elderly patient with comorbidities
3. Medicamentous interactions at the elderly patient. General pharmacological principles in geriatrics clinics
4. Taking care of the elderly patient immobilized in bed and of the patient in critical state.
5. Evaluation way of psychical state of the elderly patient: evaluation tests, filling in modes and schours calculation, psychological evaluation
6. Case study in the geriatrics department, respecting the stages of the Ministry regarding specialty contests and Higher Education admission – practical exam
M.G. 4.1.9 Hygiene -Environmental Health
Lectures 22 hours.

LECTURES PROGRAMMING

Lecture 1 - Energetic needs of the human being.

Lecture 2 Essential nutrients from food (proteins, lipids, carbohydrates).
- Classification, composition, nutritional roles, Recommended Daily Allowances (R.D.A.).
- Food sources of nutrients and the food processing impact.

Lecture 3 Fat-soluble and water-soluble vitamins.
- Fat-soluble vitamins (A, D, E, K): the role in nutrition; usual requirements; food sources and the food processing impact.
- Water-soluble vitamins: the roles in nutrition; deficiency and excess consequences; usual requirements; food sources and the food processing impact.

Lecture 4 - Major and trace elements.
- Major elements (Ca, Mg, P, S, Na, K, Chlorine): nutritional roles; food sources; usual requirements; the food processing impact.
- Trace elements (Fe, I, F): nutritional roles; food sources; usual requirements; the food processing impact.

Lecture 5 - Food groups: nutritive value; effects of an inadequate intake; R.D.A.; preserving; spoiling and preventive measures (legislation).
- Milk and milk based products.
- Meat and meat based products.
- Eggs.
- Modified genetic food.
- Bread, cereals and other grain products.
- Fruits and vegetables.
- Alcoholic and non-alcoholic drinks.
- Food additives / effects on the health status.

Lecture 6 - The significance of the air as an environmental factor.
- Effects on the health status by modifying physical proprieties and chemical composition;
- Thermal ambiance and thermal equilibrium of the human body.
- Climate and weather in health status.
Air pollution - generating agent in human pathology
- Pollution sources; factors which influence the pollution and the self purification of the air.
- Acute and chronic effects of air pollution: the irritating, asphyxiant, fibrogenic, allergenic and toxic systemic pollutants.

Lecture 7 - Biological pollution of the air related to health status physical air pollution (non ionizing radiation).
- Germs in the air.
- Air-borne diseases.
- Preventive measures (hospital acquired infection/ legal measures).
- Non ionizing radiation (ultraviolet, visible light, infrared): natural and artificial sources, healthy effects, damaging effects, preventing and fighting measures.

Lecture 8 - Physical air pollution (ionizing radiation) and general issues about water sources.
- Ionizing radiation: natural and artificial sources, healthy effects, damaging effects, preventing and fighting measures.
- Sources of drinking water.
- Pollution and self purification of the water.

Lecture 9 - Water roles in preserving health status.
- The impact of water pollution over the health status: effects of nitrates, detergents, pesticides and cancerogenic substances.
- The impact some microelements from the water: iodine and fluorine.
- Water mineralization and its influence on cardiovascular diseases.

Lecture 10 - Centralized water supply of the population.
- Water treatment in order to make it potable: effects on the life quality and health status of population
- Romanian water laws harmonized with the EU acquis
- Water-borne diseases.
- Preventing and fighting against biological pollution of the water.

Lecture 11 - Development process of the children and young people.
- Growth laws;
- Influencing factors on the physical and neuropsychical development.
- Physical and neuropsychical development:
  - Age group 0 - 3 years;
  - Age group 4 - 6 years;
  - Age group 7 - 12 years.
  - Age group 12 - 18 years.
- Education of the children and young people.
- Physiological effort graph.
- Scholar fatigue syndrome.
- Legal measures.
- Building hygiene: location, position, internal architecture, facilities in order to promote health status.
Practical activities (24 hours)

1. Nutritional inquiry focused on the essential nutrients. 2 hrs.
2. Nutritional inquiry focused on the food groups. 2 hrs.
3. Nutritional status of the people and different types of population studies. 2 hrs.
4. Hygienically and sanitary status of the food groups. 2 hrs.
5. Food related diseases and the hygienic status of the food providing and processing units. 2 hrs.
7. Evaluation methodology for the air, surfaces, surgical instruments and sterilized solutions contamination in order to prevent hospital acquired infections. 2 hrs.
8. Physical and chemical features of the drinking water: evaluation and analyzing the results. Surveillance of the nitrates level in water related to Baby blue syndrome. 2 hrs.
10. Microclimate from institutions: evaluation of the temperature, humidity, the air movements and radiant temperature. 2 hrs.
11. Objective physiological parameters used in the evaluation process of the microclimate effects over the human body. 2 hrs.
12. Diagnosing the physical and neuropsychical development of the children and teen-agers by using the sigmatic classification. Methodology of health status surveillance in children and teen-agers groups. Legislation. 2 hrs.
A. Courses

1. Occupational Medicine, Occupational Health: definition, objectives, and the concept of pluridisciplinary speciality (occupational physiology, ergonomics, occupational toxicology, and occupational diseases).

Adaptation reactions in the occupational effort, working capacity and tiredness in the working process (neuro-sensitive and musculoskeletal overload).

3. Occupational exposure to physical factors: noise, unfavourable environment, vibrations, ionizing and non-ionizing radiations.

Professional cancer: cancerogen agents, diagnosis, occupational criteria, prophylaxis.

3. Occupational exposure to mineral powder.

Pneumoconiosis: definition, classification.

Silicosis, asbestosis, coal pneumoconiosis (etiopathogenesis, diagnosis, treatment, prophylaxis).

Occupational exposure to organic powder: bisinosis, allergic extrinsic alveolitis:
(etiopathogenesis, diagnosis, treatment, prophylaxis).

4. Occupational bronchi asthma: etiopathogenesis, diagnosis, treatment, prophylaxis.

Occupational exposure to toxics – toxicokinetic and toxico-dynamic stages.

5. Occupational poisoning with lead and tetraethyl lead; mercury (metallic, inorganic and organic compounds): etiopathogenesis, diagnosis, treatment, prophylaxis.

5. Occupational poisoning with asphyxiating substances: carbon oxide, cyanic acid, cyanic compounds, gases and irritative vapours: etiopathogenesis, diagnosis, treatment, prophylaxis.

6. Occupational poisoning with organic solvents: classification, general characteristics, and mechanisms of toxic actions. Professional poisoning with aromatic hydrocarbure (benzene); nitrous and amino-derivates of benzene halogenate hydrocarbure, carbon sulphide - etiopathogenesis, diagnosis, treatment, prophylaxis.


B. Practical proceedings - 5 h

1. Metodology of knowledge and evaluation of the work conditions, professional noxious, principles of organization and conception of a work station; medical control: employment, adaptation and periodical controls. 2 h

2. Practical application: evaluation of noise, noise, powders, toxic substances, lighting, environment evaluation, stress. 2 h

3. Test grill of evaluation. 1 h

C. Clinical probation of Occupational Diseases: 10 h – Clinic of Occupational Diseases, Rehabilitation Hospital, Iasi

- Diagnosis criteria in occupational and work-related diseases: announcement, research, declaration, follow-up by Clinic of Occupational Diseases, Authority of Public Health, General Medicine Cabinet. The importance of occupational anamnesis in diagnosis of professional diseases. 2 h

- Occupational respiratory diseases: presentation of occupational diseases cases - silicosis, occupational bronchi asthma, occupational chronic bronchitis, occupational syndrome of upper respiratory ways, pulmonary emphysema. 2h

- Occupational toxicology: clinical cases –occupational chronic poisonings with: organic solvents, irritative gases and vapours, methemoglobinizant substances, carbon monoxide, pesticides. 2 h

- Occupational diseases caused by musculoskeletal and neuro-sensitive overload.

- Work-related disease: definition, classification, follow-up and importance of follow-up by occupational health service.
Subject Internal Medicine-Nephrology

MG5.1.1 Internal Medicine-Nephrology

Lectures (30 hours)

1. Nephrologic clinical exam
2. Nephrology explorations
   - Urine exam (physical-chemical, microscopic, bacteriologic)
   - Functional exploration of the kidney
   - Immunological exploration
   - Radiological and sonographic exploration of the renourinary system
3. Diagnostic orientation in renal diseases
   - Creatininemia growth
   - Hematuria
   - Edema of inferior members
   - Proteinuria and nephritic syndrome
   - Anomalies of water and sodium metabolism
   - Dehydratation
   - Hyponatremia
   - Hypokalemia
   - Hyperkalemia
4. Primitive and secondary glomerular nephropaties
   - glomerular syndromes and extrarenal associated signs
   - diagnostic query of a glomerular syndrome; renal biopsy interest
   - gravity signs, prognostic, treatment principles in chronic glomerular nephropathies
   - progressive rapid glomerulonephritis, glomerulonephritis with ANCA+, Good Pasture syndrome
   - nephrotic syndrome with minimal injuries
   - nephropathy with IgA, membranous nephropathy
   - focal and segmentary glomerulonephritis, membranoproliferative glomerulonephritis
5. Secondary nephropathies
   - diabetic nephropathies
   - viral hepatitis nephropathies
   - paraproteinemia nephropathies
6. Major collagenosis. Autoimmune hemolytic anemia
7. Lupic nephropathy
8. Vasculitis
9. Tubulointerstitial nephropathies
   - high and low ITU
   - analgesic nephropathy
   - immunoallergic interstitial nephritis
10. Renal lithiasis
11. Kidney during pregnancy, during old age, in cardiac insufficiency
12. Vascular disease of the kidney, vascular nephropathy
13. The kidney and its medications
14. Disorders of acid-base equilibrium and hydroelectric disorders
15. Acute renal insufficiency
16. Chronic renal insufficiency
   - definition, epidemiology, classification, diagnostic
   - IRC consequences: anemia, cardiovascular affectation, bone disease, disorders of hidroelectrolitic and acid-base balances, metabolic disorders
   - predialysis treatment
17. IRC
   - renal suppletion
   - renal transplant

Practice (75 hours)
1. Investigations and clinical cases
2. Investigations
   - summary urine exam
   - Urocultures
   - Antibiograms
   - renourinary echographies
   - simple renal radiographies
   - urographies
   - Glomerular filtrate determination (direct or estimate)
   - evaluating proteinuria
3. Clinical cases
- nephrogenic HTA
- Nephritic syndrome
- nephrotic syndrome
- Chronic renal insufficiency
- acute renal insufficiency
- glomerulonephritis
- diabetic nephritis
- Lupic nephritis
- Tubulointerstitial nephropathies
- urinary infections
- renal lithiasis
- lithiasic nephritic colic
- nephropathy during pregnancy
- frequent vascular nephropathies (nephroangiosclerosis, ischemic nephropathy)
Subject Neurosurgery
MG5.2.9 Neurosurgery
Lectures (10 hours)
1. Skull-brain Trauma:
definitions, etiopathogeny, clinic, treatment
2. Vertebro-medular trauma:
definitions, etiopathogeny, clinic, treatment
   peripheric nerves trauma
3. Traumatic coma. Polytraumatisms
4. Intracranial hypertension syndrome:
definitions, etiopathogeny, clinic, treatment
cerebral tumors
   emergencies in infectious diseases of SNC
5. Emergencies in vascular neurosurgical diseases
Intracranial anevrisms
   Intracranial and intraspinal arterio-venous malformations
   Spontaneous intracerebral hematoma
   neurosurgery
   Spinal degenerative diseases
   Dorsal medular compression syndrome
   Pain surgery, diskinezis surgery, epileptic surgery

Practice (15 hours)
1. TCC
   Clinical evaluation of skull/brain trauma
   Local exam in TCC
   Suture scalp wounds
2. TCC
   Paraclinical explorations in skull/brain trauma
3. TVM
   Clinical evaluation
Local exam in vertebro-medular trauma
4. TVM
Paraclinical evaluation
Taking care of the vertebro-medular patient
5. Traumatic coma
Coma diagnosis
Diferential diagnosis
Treatment
6. Intracranial anevrism
Clinical diagnosis
Paraclinical diagnosis
Therapeutic options
7. Intracranial hypertension syndrome
Clinical diagnosis
Ethiological diagnosis
Paraclinical explorations
8. Medular compression
Clinical diagnosis
Paraclinical explorations
9. Disk hernia
Clinical diagnosis
Diferential diagnosis
Treatment
Subject Neurology
MG5.2.8. Neurology
Lectures (30 hours)

1. Introduction in neurosciences
Diagnosis algorithm in neurological diseases
Exploration methods in neurology

2. Studies on peripheral roots and nerves
Classifications of peripheral neuropathies
Radicular-plexular syndromes of the superior member – brachial plex paralysis
Mononeuropathies – troncular paralyses of the superior upper member (radial, median, cubital)

3. Radicular-plexular syndromes of the inferior member – crural and sciatic neuralgies
Multiple mononeuropathies
Polyneuropathies – general issues

4. Polyneuropathies – clinical-ethyological forms, treatment
Polyradiculonevrite

5. Muscular diseases- progressive muscular dystrophy, muscular dystrophy with miotonia
Neuromuscular junction pathology- miastenia gravis
Mielites
Siringomielobulbia

6. Motor neuron disease
Paralisys of the facial nerve

7. Cranial nerves pathology
Trigemen nevralgy

8. Migraine

9. Parkinson disease and parkinsonian syndromes
Acute and chronic coreea
Degenerescence hepatolenticular

10. Epilepsies
11. Neuroinfections and demielinisant diseases
Tabes
Neurologic pathology in HIV/AIDS infections
Multiple sclerosis
14. Cerebral vascular diseases
Cerebral-vascular diseases classification
Diagnostic stages of a vascular cerebral disease
Ischemic transitory attack and ischemic stroke
Cerebral atherosclerosis, vascular dementia
15. Hemoragic stroke
Subarachnoidian hemorrhage of a medical cause
Cerebral venous thrombosis

Practice (45 hours)
2. Attitude exam
3. Static and dynamic equilibrium exam
7. Reflexes: osteotendinos, cutanat, mucous, medular automatism, posture reflexes. Quantitative and qualitative modifications of reflexes, idiomuscular contraction. Medular syndromes: of grey/white substance, mixed (total marrow section syndrome, medular hemisection syndrome)
Thalamic syndromes.
10. Muscular trophicity: trophicity disorders semiology of neurologic and extraneurologic nature. Differential ethyopathogenic diagnosis between neurogenic atrophies and miogen ones. Trophic disorders of the skin and osteo-articular tissue
15. Cortical syndromes (frontal, parietal, occipital, temporal)
Subject  Ophtalmology

MG5.2.4 Ophthalmology
Lectures (15 hours)

1. Pathology of the annexes of the ocular globe.
   a. Exophthalmic syndrome
   b. Enophthalmic syndrome
   c. Dry eye syndrome
   d. Teary eye syndrome
   e. Dacryocystites
   f. Position and form disorders of the lid
   g. blepharophtose
   h. Lids inflammations
   i. Malignant tumors of the lids
   j. Lids trauma
   k. Conjunctivitis infections: general signs, lab investigations
   l. Bacterial conjunctivitis
   m. Neonatorum ophthalmia
   n. Chlamydia conjunctivitis
   o. Viral and fungi conjunctivitis
   p. Allergic conjunctivitis
   q. Episcleritis
   r. Scleritis
   s. Irritative and chronic conjunctivitis

2. Cornea pathology
   a. Ulcerative bacterial keratitis
   b. Superficial herpetic keratitis
   c. Herpetic interstitial keratitis
   d. Herpetic keratitis treatment
   e. Keratitis produced by varicelo-zosterian virus
   f. Keratitis produced by adenoviruses
   g. Fungi keratitis
h. Immunoalergic determinism keratitis
i. Lagophtalmic keratite
j. Neurotrophic keratite
k. Dry keraconjuctivitis
l. Keratomalacia
m. Corneoscleral wounds and contusions
n. Corneean burns
3. Crystalline and vitreous pathology
a. Cataract classification
b. Congenital cataract
c. Cataract of the adult
d. Secondary cataract
e. Correction of afakia
f. Vitreous hemorrhage
4. Pathology of the retina and optic nerve
a. Obstruction of the arterial retina circulation
b. Obstruction of the venous retina circulation
c. Diabetic retinopathy
d. Retina modifications in atherosclerosis and HTA
e. Prematurity retinopathy
f. Senile macular degenerescence
g. Retinoblastom
h. Juxtabulbar optic nevrite
i. Retrobulbar optic nevrite
j. Toxic optic neuropathy
k. Ischemic optic neuropathy
l. Edematic optic neuropathy
m. Atrophic optic neuropathy
n. Trauma of the optic nerve
5. Uveal pathology, strabismus
a. Acute anterior uvea
b. Chronic anterior uvea
c. Intermediary uvea
d. Ocular toxoplasmosis
e. Coroidian malignant melanoma, coroidian metastases
f. Binocular sight physiology
g. Binocular sight disorders
h. Ethyopathogenic simultaneous strabism
i. Diagnostic simultaneous strabism
j. Clinical forma simultaneous strabism
k. Treatment simultaneous strabism
l. Paralitical strabism – diagnosis
m. Paralitical strabism – ethyopathogeny
n. Paralitical strabism – treatment
6. Fiziopathology and glaucoma clinic
a. Reology of aqueous humour
b. GPUD – epidemiology
c. GPUD – pathogeny
d. GPUD- diagnosis
e. GPUD – treatment
f. Normal tension glaucoma
g. Secondary glaucoma
h. Primitive glaucoma with closed angle – ethiopathogeny
i. Primitive glaucoma with closed angle – diagnosis
j. Primitive glaucoma with closed angle – treatment
k. Congenital glaucoma
7. Refraction vices
a. Ocular dioptre
b. Hypermetropy – pathogenic, diagnosis
c. Hypermetropy – treatment
d. Myopia – classification, diagnosis
e. Myopia – degenerative
f. Myopia - treatment
g. Astigmatism
h. Accommodation – physiology
i. Disorders – accommodatio
j. Anziometropy
k. Association of a refraction static vice with a dynamic one

Practice (30 hours)
1. Anatomy and physiology of the visual apparatus
2. Clinical semiology of the visual apparatus
3. Anterior pole of the ocular globe examination (diffuse light, focalised light)
4. AV determination and the causes of AV diminishing
5. CV determination (comparative methods, perimetry)
6. Intraocular pressure determination (digital method)
7. Subjective refraction determination
8. Determination of the chromatic sense
9. Recognizing lenses
10. Examining the posterior pole (ophthalmoscopy)
11. Ocular bandages
12. Extraction of foreign bodies from cornea, emergency treatment for burns and wounds.
Subject NET

MG5.1.7 NET

Lectures (28 hours)

1. Anatomy and clinical physiology notions of the pharynx, including the Waldeyer lymphatic circle – exploration methods;
2. Acute anginas (ethiology, clinic, treatment)
3. Complications of the acute anginas
4. Infectious processes and chronic inflammations of the pharynx (Chronic Tonsillitis, chronic pharyngeal, specific infections and focus infections)
5. Benin and malignant tumors of the pharynx
6. Pharynx-esophagus foreign bodies
7. Burns and stenoses of pharynx-esophagus
8. High and low disphagic symptom
9. Esophagus tumors
10. Anatomy and clinical physiology notions of the larynx and TRACHEOBRONCHITIS tree – exploration methods
11. Inflation processes and acute and chronic infections of the larynx
12. Benin larynx tumors
13. Malignant tumors of the larynx (ethyopathogeny, pathological anatomy, symptoms)
14. TNM standardization and complex treatment of laryngeal cancer
15. Tracheobronchitis foreign bodies
16. Tracheotomy (techniques, indications)
17. Larynges trauma
18. Differential diagnosis of cervical swallowing
19. Anatomical and clinical physiology notions of the nose – exploration methods
20. Obstructive nasal syndrome
21. Vascular syndrome (epistaxis) – ethyopathogeny, treatment principles
22. Malformations of the nasal pyramid (chonal atresies)
23. Trauma of the nasal pyramid, nasal hole, annex cavitations
   (clinic, treatment principles)
24. Vestibular rhinitis
25. Acute and chronic rhinitis
26. Specific infections of nasal holes and annex cavitations
27. Acute and chronic sinusitis
28. Sinusitis complications
29. Rhino-sinusitis allergy
30. Nasal polyposis
31. Benin and malignant tumors of nasal holes and annex cavities
32. Cranio-cervical-facial pains
33. Anatomy and clinical physiology notions of the ear – exploration methods
34. Reflex othalgy
35. Ear malformations
36. Ear trauma
37. Inflammatory and infectious pathology of the external ear (furuncle, diffuse extern otitis, otomycosis)
38. Inflammatory and acute infectious pathology of the median ear (mastoida including)
39. Inflammatory and chronic infectious pathology of the median ear (mastoida including)
40. Exocranial complications of infectious acute or chronic otomastoidian processes (exterior otomastoidian, paralysis of the facial nerv, labyrinthitis)
41. Endocranial complications of infectious acute or chronic otomastoidian processes
42. Deafness in adults, otosclerosis, suddenly installed deafness
43. Deafness in children
44. Professional deafness
45. Recovery of deaf patient (auditive prosthesis, ear implant)
Cervical extravisceral pathology – salivary glands, fistulas and lateral median cysts, thyroid gland

Practice (32 hours)
1. General issues for NET, connections with other specialties, the functioning of a clinical NET service. Clinical observations sheet with the peculiarities of the local exam
2. Instruments used in NET; examinations with the frontal mirror. Clinical exam and paraclinical investigations of cranial nerves pathology of the NET sphere. Clinical cases
3. Clinical exam of the patient with bucopharingoscopy, posterior rhinoscopy, ways of sampling pharynx exudates and pharynx biopsy. Clinical cases presentation with acute and chronic inflammatory pharynx – patient examination
5. Tumoral pharyngian pathology with examination of basicranial and cervical ganglionary groups. Clinical cases.
7. Semiology and examination way of patients with larynx pathology. Direct and indirect laryngoscopy. Clinical cases
8. Inflamatory larynx pathology for adults and children. Clinical cases
10. Test
11. Semiology and examination way of patients with rhino-sinusitis affections: anterior rhinoscopy, posterior rhinoscopy etc. Clinical cases
12. Epistaxis- therapy methods; chemical cauterization, anterior and posterior tampon use; traumatic rhino-sinusitis pathology: immobilization of nasal
pyramid fractures. Therapy of nasal obstructions; Extraction of foreign bodies from the nasal cavities.


1. **Diseases of the respiratory device**
   Infections of respiratory ways: rhinopharyngitis, adenoids, laryngitis, otitis
   Bacterial pneumonia: lobe pneumonia, bronchopneumonia, staphylococci pneumonia, negative Gram germ pneumonia
   Pneumonia with Pneumocistis Carinii
   Viral pneumopaties, acute bronchiolitis, other viral pneumopathies
   Bronchic asthma

2. **Diseases of the digestive apparatus**
   Acute diarrhea diseases with or without dehydration syndrome
   Malabsorbtion syndrome (mucoviscidosis, celiachia, cow milk intolerance, disaccharides intolerance)
   Gastric and duodenal ulcer in children
   Chronic hepatitis and acute hepatic insufficiency

3. **Diseases of the urinary apparatus**
   Acute diffuse postinfectious glomerulonefritis
   Nephrotic syndrome
   Infections of the urinary tract
   Acute and chronic urinary insufficiency

4. **Pathology of the central nervous system**
   Convulsions and epilepsies in children
   Infantile cerebral paralyses
   Intracranial hypertension

5. **Diseases of the cardiovascular system**
   Congenital cardiopathies
   Supraventricular paroxistic tachycardia
   Endocardic fibroelastosis
   Arterial hypertension
   Childhood shock
Cardiac insufficiency

6. Rheumatism diseases and immunology
Acute articular rheumatism
Juvenile chronic arthritis
Vasculitis (Henoch-Schonlein, Kawasaki disease)
Systemic Lupus eritematos, dermatomiositis

7. Nutrition pathology
Malnutrition of the baby
Rickets and tetany
Juvenile diabetes and nutrition diseases

8. Hematological and oncological diseases during childhood
Hyposideremic hypochrome anemia
Medular insufficiency
Lack of folic acid and B12 vitamin anemies
Hemolitic anemies (congenital spherocitosis, G6PD lack, talasemies, autoimmune anemies)
Hemophilia
Immunologic trombocitopenic purpura
Acute and chronic leukemia
Malignant limphoames
Solid tumors (histiocytosis X, neuroblastome, nephroblastome)

9. Emergencies
Childhood trauma
Acute cerebral edema
Acute respiratory insufficiency
Acute intoxication with alcohol, CO2, mushrooms, nitrits, organophosphores, tryclic antidepresives, corrosive substances (acid and alkaline) etc

Practice (166 hours)
1. Clinical pediatrics observation sheet
2. Clinical exam of the ill child
3. Diagnosis strategies and treatment of the chronic child diseases
4. Diagnosis strategies and treatment of severe child diseases
5. Therapeutic behavior in child emergencies
6. Medicine administration in pediatrics
7. Venous, rachidian, articular punctions, thoracocentesis, paracentesis
8. Interpreting results of biological investigations
9. Interpreting results of imagistic investigations
10. Interpreting functional respiratory samples in children
11. Clinical cases.
Subject Pneumology
MG5.1.2 Pneumology

Lectures (15 hours)
1. Definition, ethyology, tuberculosis epidemiology
2. Tuberculosis pathogeny, primary tuberculosis of the child – positive and differential diagnosis
3. Secundary pulmonary tuberculosis - positive and differential diagnosis (round opacities, cavities)
4. Tuberculosis treatment; tuberculotic pleurisy
5. Tuberculosis of the immunodepressed (diagnosis and treatment); pulmonary complications of HIV infection
6. Sarcodisy
7. Mediastinal syndromes; pneumothorax

Practice (30 hours)
1. Signs and symptoms in respiratory system affections
2. Sputa exam (sampling, transport, examination)
3. Tuberculina testing (types, administration and reading methods, interpretation, indications and counter-indications, false negative and positive reactions)
4. BCG vaccine
5. Treatment principles in tuberculosis
6. Patient surveillance methods
7. Tuberculosis chimiprofilaxy
8. Multidrugresistant tuberculosis and treatment in special cases
9. Fibrobrochoscopic exam
10. Punction and pleural biopsy
11. Thoraxcopy
12. Respiratory administration of meds
13. Imagistic explorations
14. Respiratory functional samples

15. Emergency treatment of asthma, acute respiratory insufficiency, pneumonia, etc. Cardio-respiratory resuscitation.