

**Plan of the classes, seminars and lectures**

 **in Propaedeutics of Internal Diseases**

**for the 3rd Year Medical Students**

 **in the Winter Semester 2024/2025**

**The Internal Medicine Propaedeutics practical classes take place weekly in two shifts, from 8:30 AM to 10:45 AM and from 11:00 AM to 1:15 PM, at different locations.**

**For the classes, knowledge of the current topic, as well as previous classes and lectures, is required.**

**Basic literature:**

**1.Macleod’s Clinical Examination; 14th edition; J.Alastair Innes, Anna Dover, Karen Fairhurst;Copyright: 2018 ; Publisher: Elsevier**

**2.Bates' Guide T o Physical Examination and History T aking; Lynn S. Bickley MD and all.; Edition:13; Copyright 2020; Publisher: McGraw Hill/Medical**

**3.Harrison's Principles of Internal Medicine, T wenty-First Edition (Vol.1 & Vol.2) Joseph**

**Loscalzo andall. 21st Edition; Copyright 2022; Publisher: McGraw Hill/Medical**

**Additional literature:**

**1.Davidson’s Principles and Practice of Medicine; vol 1-3; Stuart H. Ralston and all; 23rd edition; Copyright2018; Publisher: Elsevier**

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| Ćwiczenie 1 | **Regulations of the Department and Health & Safety (H&S)****Medical history****General medical history:****- Patient identification data and source of the interview,****- Main complaints,****- Previous course of the disease (including allergies, medications, substance use),****- Medical history (childhood illnesses, past diseases, hospitalizations, surgeries, gynecological history, psychiatric problems),****- Family history,****- Personal and social background,****- Review of symptoms by organ systems.****Seven features of a symptom:****- Location,****- Qualities,****- Quantity or severity,****- Temporal characteristics (onset, duration),****- Conditions of occurrence,****- Alleviating and aggravating factors,****- Associated symptoms.****Standard set of questions for symptom review.****General Appearance:****- Overall health condition, external appearance, patient's position in bed, posture and gait, height and weight (BMI calculation)****State of Consciousness****Skin and Nail Assessment:****- Color, cyanosis, pallor, clubbing of the fingers, etc.****Lymph Nodes:****- Location, description of palpable lymph nodes****Edema:****- Generalized or localized, most common causes****Basic Vital Signs:****- Blood pressure (blood pressure classification), pulse examination, respiratory rate and rhythm, body temperature****Lymph Nodes:****- Location, description of palpable lymph nodes****Edema:** **- Generalized or localized, most common causes****Basic Vital Signs:****- Blood pressure (classification of blood pressure), pulse examination, respiratory rate and rhythm, body temperatur** |
| Ćwiczenie 2 | **Examination of the Head and Neck****Head:****- Assessment of head size and shape, common disorders****Face:****- Symmetry, functional tests in facial nerve (VII) palsy****Palpation:****- Palpation of the sinus region, trigeminal nerve exits, earlobe, and mastoid process****Eye Examination:****- Position, alignment, and mobility of the eyeballs****- Basic visual field testing****- Visual acuity****- Assessment of the sclera, iris, and conjunctiva****- Pupil description, light reflexes (direct and consensual), accommodation and convergence reflexes****Eye Symptoms in Graves' Disease:****- Graefe's sign****- Kocher's sign****- Möbius sign****Ear Examination:****- Assessment of the external ear: auricles, external auditory canal****Nose Examination:****- Shape and symmetry, evaluation of the nasal vestibule, nasal passage patency, and sense of smell****Oral Examination:****- Assessment of the lip vermilion, oral vestibule, teeth, and oral mucosa****- Tongue examination: shape, papillae development, taste, tongue mobility, assessment of the pharynx and palatine tonsils, phonatory movement of the soft palate****Lymph Nodes Examination:****- Examination of lymph nodes in the head and neck region****Neck Examination:****- Mobility, symmetry, carotid artery pulse, jugular vein distention****Thyroid Examination:****- Examination methods, description of goiter: lobe size, tenderness, consistency, mobility relative to the underlying tissue, vascular bruit (auscultation), skin changes over the thyroid** |
| Ćwiczenie 3 | **Lung Examination:****Topography of the Chest:****- Chest palpation and percussion****Medical History:****- Typical symptoms of respiratory diseases (chest pain, dyspnea, wheezing, cough, hemoptysis)****Chest Shape and Symmetry:****- Types of chest shapes****Landmarks and Lines on the Chest:****- Orientation lines and locations on the chest, course of fissures, and lobar projections on the chest****Types of Breathing:****- Tachypnea** **- Bradypnea** **- Kussmaul's breathing** **- Cheyne-Stokes breathing** **- Biot's breathing****Chest Tenderness Examination****Assessment of Respiratory Mobility of the Chest****Evaluation of Tactile Fremitus:****- Diminished or increased fremitus****Percussion of the Chest:****- Typical percussion sounds: dull, resonant, hyperresonant, tympanic****Lung Borders:****- Percussion of the diaphragm level, determination of lower lung border mobility****Refinement of Examination Techniques** |
| Ćwiczenie 4 | **Lung Examination: Auscultation****Basic Breath Sounds:****- Vesicular breath sounds****- Bronchovesicular breath sounds****- Bronchial breath sounds****Additional Breath Sounds:****- Crackles (late inspiratory, early inspiratory, mid-inspiratory, and expiratory)****- Wheezes****- Rhonchi****- Pleural friction rub****- Stridor****Additional Breath Sounds Explanation:****- Clarification of previous terminology (rales)** **Refinement of Examination Techniques** |
| Ćwiczenie 5 | **Heart Examination: Palpation, Percussion, Auscultation - Heart Sounds****Medical History:****- Typical symptoms of heart diseases (chest pain, palpitations, dyspnea, orthopnea, paroxysmal nocturnal dyspnea, peripheral edema)****Heart Projection on the Chest:** **- Visualizing heart position in relation to chest landmarks****Inspection and Palpation of the Anterior Chest Wall:****- Evaluation of the apical impulse (location, diameter, amplitude)** **- Right ventricular heave** **- Cardiac murmurs (thrills)****Auscultation:****- Areas for auscultating heart sounds, identifying heart tones****Heart Sounds:****- S1, S2 - causes, timing in the cardiac cycle** **- Additional sounds: S3, S4, clicks, pericardial knock** **- Frequency, intensity, regularity, muffling, and accentuation of heart sounds in healthy individuals** **- Gallop rhythm****Splitting of the Second Heart Sound:****- Physiological, pathological: simple and paradoxical (differentiation)****Heart Rate Abnormalities:** **- Tachyarrhythmia, bradyarrhythmia****Irregular Heart Rhythm:** **- Atrial fibrillation (complete irregularity), extrasystolic irregularity (sporadic, rhythms like bigeminy, etc.)** **- Pulse deficit****Refinement of Examination Techniques** |
| Ćwiczenie 6 | **Heart Examination: Auscultation - Heart Murmurs****Heart Murmurs – Classifications:****- Organic, functional, and incidental murmurs** **- Ejection murmurs and regurgitant murmurs****Murmur Characterization and Identification of Cardiac Defects:****- Loudness (graded by intensity scale)****- Point of maximal intensity (punctum maximum)****- Timing in the cardiac cycle (systolic or diastolic)****- Radiation of the murmur****Pericardial Friction Rub****Auscultation Positions:****- Left lateral decubitus position****- Sitting position with forward leaning****Functional Maneuvers in Heart Auscultation:****- Standing and squatting****- Inspiration and expiration****Refinement of Examination Techniques** |
| Ćwiczenie 7 | **Abdominal Examination: Topography, Palpation, Percussion, and Signs of Peritonitis****Medical History:****- Typical symptoms of gastrointestinal diseases (pain, heartburn, indigestion, dysphagia, diarrhea, constipation, jaundice, upper and lower gastrointestinal bleeding)****Topography of Abdominal Organs:****- Orientation lines and landmarks on the abdominal wall****Inspection:****- Skin assessment, venous dilation, umbilicus, abdominal shape, symmetry, organ enlargement, peristalsis, pulsations, hernias****Auscultation:****- Assessment of peristaltic movements, vascular sounds from renal arteries, abdominal aorta, iliac arteries, and femoral arteries****Percussion:****- Identification of fluid, air, and organ size****Palpation Examination:****- Superficial and deep palpation****Refinement of Examination Techniques** |
| Ćwiczenie 8 | **Examination Methods:****Liver:** **- Including percussion assessment of liver span****Spleen:** **- Including the technique for splenic percussion** **Pancreas****Kidneys****Examination of the Stomach and Duodenum****Description of Enlarged Organs:** **- Tenderness, size, consistency, homogeneity****Clinical Signs (How to Elicit and Their Clinical Significance):****- Blumberg’s Sign****- Chełmoński’s Sign****- Rovsing’s Sign****- Jaworski’s Sign****Methods for Examining Ascites****Refinement of Examination Techniques** |
| Ćwiczenie 9 | **Physical Examination of the Vascular System****Common Symptoms and Their Characteristic Features:****- Intermittent Claudication****- Rest Pain****- Lower Limb Edema****- Raynaud's Phenomenon****Examination of the Arterial System:****- Pulse Examination Technique\*\*** **- Auscultation Technique for Arteries\*\*** **- Allen's Test****Assessment of Internal Jugular Vein Pressure:****- Technique for Examination****Examination of the Venous System of the Lower Limbs:****- Trendelenburg Test****Refinement of Techniques**  |
| Ćwiczenie 10 | Review of Exercises 1-10- Credit  |
| Seminarium 1 (3 h) | **All ergology in Practice:****- Basics of Spirometric Examination****Presentation of Student-Led Lectures:****- 30-minute presentations (each clinical group assigned one topic, with topics allocated based on alphabetical group numbering):**  **- A: Asthma**  **- B: Chronic Obstructive Pulmonary Disease (COPD)**  **- C: Allergic Rhinitis**  **- D:Anaphylaxis** **Topics:****1. Asthma** **2. Chronic Obstructive Pulmonary Disease (COPD)** **3. Food Allergy** **4. Anaphylaxis**  |
| Seminarium 2 (2h)  | **Review of Theoretical Content from Exercises 1-10****- Theoretical test consisting of 10 multiple-choice questions (1 correct answer and 3 distractors). Correct answers to 6 or more questions is required to pass.** |

**Lectures:**

**1.Organizational issues. Medical history. Vital sings. Head and neck examination.**

**2.Lung examination – part I**

**3.Lung examination – part II**

**4.Heart examination – part I**

**5.Heart examination – part II**

**6 Principles of abdomen examination –part I**

**7.Abdomen examination – part II**

**8.Veins and arteries examination.**