



УНИВЕРЗИТЕТ У БАЊОЈ ЛУЦИ
UNIVERSITY OF BANJA LUKA

МЕДИЦИНСКИ ФАКУЛТЕТ
FACULTY OF MEDICINE



REGISTER OF STUDENT SUMMER CLINICAL PRACTICE

Academic Year/_____

Student/name and surname, index number _____

Responsible person _____

Institution /Department _____

INTERNAL MEDICINE (SUMMER CLINICAL PRACTICE, 90 HOURS)

Clinical skill	Duration/ Date	Institution/Clinic	Total number of hours	Verified by
Ethical behavior and patient information: skill in communicating with patients about planned procedures, risks, and benefits, assisting in decision-making; skill in communicating with other medical professionals.				
Specificities of anamnesis and clinical examination in cardiology				
Chest pain: anamnesis, clinical examination, diagnostic protocol, differential diagnosis				
Electrocardiography (ECG): recording, interpretation of physiological findings, presentation and interpretation of various pathological findings				
Acute coronary syndrome: review of theoretical foundations, anamnesis and clinical examination of the patient, ECG recording, laboratory diagnostics, echocardiography Protocols for acute myocardial infarction Management: theoretical foundations, case studies Coronary angiography				

<p>Acute pulmonary embolism - review of theoretical foundations, anamnesis, and clinical examination of the patient, risk factor assessment and scoring scales ECG recording, laboratory diagnostics, echocardiography, and radiological diagnostics Protocols for acute management and therapeutic approaches for pulmonary embolism Acute care protocols Therapeutic protocols Case Studies</p>				
<p>Aneurysm and aortic dissection - Review of theoretical foundations, anamnesis, and clinical examination of the patient, laboratory diagnostics, ultrasound diagnostics, and radiological diagnostics Protocols for acute management Emergency care procedures Therapeutic approaches Case Studies</p>				
<p>Dyspnea - anamnesis and clinical examination, differential diagnosis, diagnostic and therapeutic approach</p>				
<p>Heart failure -theoretical foundations, anamnesis and clinical examination of the patient, diagnostic and therapeutic approach, differential diagnosis Case studies</p>				
<p>Acute heart failure and pulmonary edema - diagnostic and therapeutic approach and management protocols</p>				
<p>Cardiac rhythm disorders - theoretical basics, ECG recordings, differential diagnosis, therapeutic approach</p>				

Hypertension - theoretical basics, differential diagnosis, diagnostic and therapeutic approach, management of hypertensive crises				
Mentorship in the cardiology outpatient clinic of the emergency medicine center, attending and assisting in taking patient history, performing clinical examinations, and conducting primary diagnostic and therapeutic procedures				
Specifics of history-taking and clinical examination in pulmonology				
Clinical methods for assessing the respiratory status of a patient: clinical examination, measurement of respiratory rate, pulse oximetry, non-invasive respiratory monitoring, interpretation of blood gas partial pressure results				
Methods for evaluating lung function: spirometry, body plethysmography, diffusion capacity, bronchodynamic tests – bronchodilator and bronchoprovocation tests				
Radiological diagnostics in pulmonology: chest X-ray interpretation and evaluation of physiological and various pathological findings with case presentations				
Invazivna dijagnostika u pulmologiji – bronhoskopija, transtorakalna punkcija i biopsija, pleuralna punkcija Protokol dijagnostike solidnih promjena u plućnom parenhimu – prikazi slučajeva				
Hemoptysis – patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach, and management				
Pneumoniae – review of theoretical foundations, patient history and clinical examination, laboratory,				

radiological, and microbiological diagnostics, scoring scales, therapeutic approach Case presentations				
Tuberculosis – review of theoretical foundations, patient history and clinical examination, laboratory, radiological, and microbiological diagnostics, therapeutic approach Latent and multi-drug resistant tuberculosis Case presentations				
Acute and chronic respiratory insufficiency – theoretical foundations, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach, management protocols (oxygen therapy, non-invasive and invasive mechanical ventilation)				
Emergency conditions in pulmonary oncology – diagnostic-therapeutic approach				
Asthmatic status and acute exacerbation of chronic obstructive pulmonary disease – patient history and clinical examination, diagnostic-therapeutic approach, management, differential diagnosis, case presentations				
Mentorship experience in the pulmonary outpatient clinic of the Emergency Medicine Center, attending and assisting in patient history taking, clinical examination, and primary diagnostic-therapeutic management.				
Specifičnosti anamneze i kliničkog pregleda u endokrinologiji				
Diseases of the anterior pituitary and hypothalamus – theoretical foundations, patient history and clinical examination, diagnostic-therapeutic approach Case presentations				

Thyroid diseases – theoretical foundations, patient history and clinical examination, diagnostic-therapeutic approach Case presentations				
Adrenal gland diseases – theoretical foundations, patient history and clinical examination, diagnostic-therapeutic approach Case presentations				
Diabetes mellitus – theoretical foundations, patient history and clinical examination, diagnostic-therapeutic approach, patient monitoring protocols Chronic complications of diabetes				
Acute complications of diabetes – diabetic ketoacidosis, hyperosmolar state – theoretical foundations, patient history and clinical examination, diagnostic-therapeutic approach, and management protocols				
Osteoporosis and disorders of calcium, phosphate, and magnesium metabolism				
Stay with a mentor in the internal medicine clinic at the Emergency Medicine Center, attending and assisting in the taking of history, clinical examination, and primary diagnostic-therapeutic management of endocrinology patients				
Specifics of medical history and clinical examination in gastroenterology and hepatology				
Abdominal pain – patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach				
Radiological and invasive diagnostics in gastroenterology and hepatology				

Jaundice – theoretical foundations, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach				
Liver failure, acute and chronic hepatitis, cirrhosis of the liver – theoretical foundations, patient history and clinical examination, diagnostic-therapeutic approach				
Bleeding from the upper and lower gastrointestinal tract – theoretical foundations, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach Case presentations				
Inflammatory bowel diseases – review of theoretical foundations, patient history and clinical examination, laboratory, radiological, and invasive diagnostics, therapeutic approach Case presentations				
Acute pancreatitis – review of theoretical foundations, patient history and clinical examination, laboratory and radiological diagnostics, therapeutic approach Case presentations				
Mentorship in the internal medicine clinic at the Emergency Medicine Center, attending and assisting in taking the history, clinical examination, and primary diagnostic-therapeutic management of patients suspected of having gastrointestinal, liver, and pancreatic diseases				
Specificities of patient history and clinical examination in hematology				
Anemia – review of theoretical foundations, classification, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach				

Leukopenia and neutropenia – etiology and differential diagnosis, diagnostic-therapeutic approach and protocols				
Acute and chronic leukemias – theoretical foundations, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach Case presentations				
Lymphomas – theoretical foundations, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach Case presentations				
Lymphadenopathy – patient history and clinical examination, differential diagnosis and diagnostic protocol, laboratory, radiological, and microbiological diagnostics Case presentations				
Hemostasis disorders – patient history and clinical examination, differential diagnosis and diagnostic protocol, laboratory and radiological diagnostics Case presentations				
Stay with a mentor in the internal medicine clinic of the Emergency Medicine Center, attending and assisting during the collection of patient history, clinical examination, and primary diagnostic-therapeutic management of hematology patients.				
Specifics of patient history and clinical examination in nephrology				
Oliguria and anuria – patient history and clinical examination, differential diagnosis, and diagnostic-therapeutic approach				

Acute renal insufficiency - theoretical foundations, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach Case studies				
Chronic renal insufficiency - theoretical foundations, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach Case studies				
Methods for kidney function replacement - hemodialysis, peritoneal dialysis, kidney transplantation				
Stay with a mentor in the internal medicine clinic of the Emergency Medicine Center, attending and assisting during the collection of patient history, clinical examination, and primary diagnostic-therapeutic management of nephrology patients				
Specifics of patient history and clinical examination in rheumatology				
Rheumatoid arthritis - theoretical foundations, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach Case studies				
Systemic lupus erythematosus - theoretical foundations, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach Case studies				
Acute allergic reactions - theoretical foundations, patient history and clinical examination, differential diagnosis, diagnostic-therapeutic approach Case studies				

Stay with a mentor in the internal medicine clinic at the Emergency Medical Center, attending and assisting in taking the medical history, clinical examination, and primary diagnostic-therapeutic management of a rheumatological patient				
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Place and date

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RADIOLOGY (SUMMER CLINICAL PRACTICE, 60 HOURS)**Duration:** 2 weeks (10 weekdays)**Daily Schedule:** 6 hours per day (e.g., 8:00 AM – 2:00 PM)

Clinical skill	Duration/ Date	Institution/Clinic	Total number of hours	Verified by
Week 1: Introduction to Radiology and Image Acquisition				
Day 1: Orientation & Radiology Department Overview				
Introduction to the radiology department and key personnel; ethical behavior and information	1 hour	Department of Clinical Radiology, UCC of Republic of Srpska		
Overview of safety protocols (radiation protection, patient safety)	1 hour	Department of Clinical Radiology, UCC of Republic of Srpska		
Tour of imaging modalities: X-ray, CT, MRI, ultrasound	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Introduction to PACS (Picture Archiving and Communication System)	1 hour	Department of Clinical Radiology, UCC of Republic of Srpska		
Q&A session with a radiologist	1 hour	Department of Clinical Radiology, UCC of Republic of Srpska		
Day 2: Fundamentals of X-Ray Imaging				
Lecture: Principles of X-ray imaging and radiation safety	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Observe chest and extremity X-rays being performed	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Image interpretation: Normal vs. abnormal X-rays	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Day 3: Introduction to CT Scans				
Lecture: Basics of computed tomography (CT) and clinical indications	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Observe CT procedures (head, chest, abdomen)	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		

Review CT images with a radiologist: Recognizing normal anatomy	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Day 4: Introduction to MRI				
Lecture: Principles of MRI, safety considerations, and clinical indications	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Observe MRI procedures (brain, spine, abdominal, joints)	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Introduction to MRI sequences and identifying normal anatomy	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Day 5: Ultrasound Imaging				
Hands-on demonstration: Basics of ultrasound scanning techniques	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Observe abdominal and soft tissue ultrasound procedures	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Case review: Common ultrasound findings (e.g., gallstones, cysts, masses)	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Week 2: Image Interpretation, Procedures, and Case-Based Learning				
Day 6: Introduction to Image Interpretation Techniques				
Workshop: Systematic approach to interpreting X-rays, CTs, and MRIs	3 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Hands-on practice: Review cases under supervision	3 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Day 7: Radiology in Emergency Medicine				
Lecture: Common emergency radiology cases (fractures, stroke, pneumothorax)	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Case-based learning: Identify emergency findings in X-rays and CT scans	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Feedback session with an emergency radiologist	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		

Day 8: Interventional Radiology (IR)				
Introduction to interventional radiology procedures	1 hour	Department of Clinical Radiology, UCC of Republic of Srpska		
Observe procedures (e.g., biopsies, catheter placements, MW ablation, PTA)	3 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Case review and Q&A with an interventional radiologist	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Day 9: Abdominal Imaging				
Lecture: Fundamentals of abdominal imaging (X-ray, ultrasound, CT, MRI) and common pathologies	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Case-based workshop: Identify normal and abnormal findings (appendicitis, gallstones, liver masses, bowel obstruction)	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Image interpretation practice under supervision	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Day 10: Final Assessment & Reflection				
Image interpretation assessment (X-rays, CT, MRI)	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Group discussion of challenging cases, Ethical behavior and patient information: skill in communicating with patients about planned procedures, risks, and benefits, assisting in decision-making; skill in communicating with other medical professionals.	1 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
Presentation of a radiology case study	2 hours	Department of Clinical Radiology, UCC of Republic of Srpska		

Feedback session and reflection on learning objectives	1 hours	Department of Clinical Radiology, UCC of Republic of Srpska		
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SURGERY (SUMMER CLINICAL PRACTICE, 90 HOURS)

Clinical skill	Duration /Date	Institution/Clinic	Total number of hours	Verified by
Medical history and physical examination of a surgical patient			10	
Basic wound care techniques			10	
Basic surgical techniques			5	
Management of emergency cases			10	
Local anesthesia			10	
Recognition and treatment of fractures			10	
Management of infections			5	
Care for specific surgical conditions			10	
Postoperative patient management			10	
Ethical behavior and informing patients			5	
Teamwork and referral to a specialist			5	

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Signature

CLINICAL BIOCHEMISTRY (SUMMER CLINICAL PRACTICE, 60 HOURS)

Clinical skill	Duration/ Date	Institution/Clinic	Total number of hours	Verified by
Interpretation of biochemistry and basic hematology analyses in primary healthcare		Department of Family medicine	10	
Interpretation of laboratory results in emergency medical situations		Department of Emergency medical assistance	10	
Biomarkers in metabolic and endocrine diseases		Hospital or University Clinical Center (Department of Endocrine and Metabolic Diseases)	5	
Biomarkers in cardiovascular diseases		Hospital or University Clinical Center (Cardiology department or clinic for cardiovascular diseases)	5	
Biomarkers in malignancies		Hospital or University Clinical Center (Oncology department or clinic for oncological diseases)	5	
Biomarkers in liver and gastrointestinal diseases		Hospital or University Clinical Center (Gastroenterology department)	5	
Specifics of laboratory analysis interpretation in pediatric populations		Specialized pediatric clinic	5	
Specifics of laboratory analysis interpretation in pregnant women		Specialized gynecological clinic	5	
Use of POCT (point-of-care testing) in healthcare institutions		Specialized clinics that use POCT	5	

Ethical behavior and patient information: skill in communicating with patients about planned procedures, risks, and benefits, assisting in decision-making; skill in communicating with other medical professionals.		Department of Family medicine	5	
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