



School of Medicine, University of Mostar Course:

Pediatrics

Course Coordinator: Marija Šandrak Beslač, MD, PhD Study:

Medical Studies in English

Year of the study: 6th

Academic year: 2024./2025.

COURSE SYLLABUS

Course information (basic description, general information, teaching overview, required equipment, and preparation, etc.):

The main aim of this course is to achieve students understanding of the basics of pediatrics as a discipline that deals with children from birth to adulthood. The aim of pediatrics classes is to train students to recognize, treat and prevent diseases in children, and to carry out the rehabilitation of impaired functions, based on acquired knowledge of the etiopathogenesis of diseases and acquired practical skills. Through theoretical and practical forms of teaching, the student is enabled to acquire knowledge, skills, habits, and attitudes, which enable him to work in primary health care. The content of classes in pediatrics includes pediatric propaedeutics, clinical pediatrics and social-preventive pediatrics.

The course is performed in the winter semester (from November 27, 2024 to January 22, 2025, with a free period from December 21, 2024 to January 6, 2025 for the Christmas and New Year holidays) at the sixth year of study, in the form of lectures (50 teaching hours), seminars (60 teaching hours), and practicals (90 teaching hours). A) Lectures are a form of classes that provide an introduction and an overview of a thematic unit, providing students with fundamental knowledge, theories, and concepts related to pediatric healthcare. Students are expected to listen, take notes, and engage with the material being presented. B) Seminars are interactive sessions where students and teachers gather to discuss specific topics, encouraging critical thinking, problem-solving, and active participation, enhancing student`s understanding of complex pediatrics concepts and keeping them updated with the latest developments in field. C) Practicals are part of pediatrics course typically

involves hands-on clinical training and experiences in various pediatric clinical settings, from outpatients to intensive care unit. During this part, students observe and participate in the diagnosis, treatment, and management of pediatric patients under the supervision of experienced healthcare professionals – academic assistants.

Classes are conducted on-site and online (through e-learning platforms (Google - Meet)).

Lectures and seminars will be held at the lecture hall of the School of medicine Mostar. Practical clinical skills will be organized in two groups according to the schedule and will be held at the Pediatric Clinic, University Clinical Hospital Mostar. Practicals will be held in the morning (according to the students' suggestions), and lectures and seminars will be held after 1:00 p.m. in blocks of three or four hours, depending on the course unit.

Class attendance and student participation in all forms of classes are compulsory in accordance with the Law and the Statute of the Faculty of Medicine in Mostar. Accordingly, student attendance at lectures, seminars, and practicals will be regularly checked. Only justifiable absences due to, for example, illness will be acceptable within the limits allowed and according to the Ordinance on Studies.

The student is obligated to prepare in advance the predefined material that is being discussed on seminars and evaluate on practicals. The teacher/course coordinator are obliged to inform students in advance about the seminar they should prepare. Students are required to wear white coats and masks and have a stethoscope during practicals.

The teacher/course coordinator continuously evaluates student participation throughout seminars and practicals (demonstrated knowledge, the ability to correlate a patient` history, physical status, and diagnostic procedures into disease diagnose and appropriate treatment management). Student activity during classes (lectures, seminars, practicals) is certified in the daily work log.

Readings:

Required reading:

- Book 1. Selected chapters from Nelson's Textbook of Pediatrics, 21st ed. Elsevier, 2019.
- Book 2. Lissauer T, Carroll W, eds. Illustrated Textbook of Paediatrics, 6th edition, Elsevier, 2021.

Recommended for additional reading:

- Selected papers from medical books and journals

Exam (exam taking, detailed exam description of the oral/written/practical part, point distribution, grading criteria):

Final exam has three parts: practical, written, and oral exams.

During the practical exam, the assistant evaluates the student's practical skills in pediatrics. The practical exam begins with an interview with a patient, and his parents. History taking and

performing physical exam of the patient, beside interpretation and evaluation of the clinical and laboratory data, is of outmost importance for the assessment of student's clinical performance. The practical part of the exam will be taken in the final part of the course during the practicals at the clinic, before the written and oral exam.

The written exam consists of 50 test-questions with multiple choice of answers (one of the five offered answers is always correct). To pass the exam (grade sufficient), the student must answer at least 55 % of the questions correctly. According to the Rulebook on Studying at the University of Mostar grades are assigned as follows: 0-54 % insufficient (1); 55-66 % sufficient (2); 67-78 % good (3); 79- 90 % (very good 4); 91-100 % excellent (5).

To take the oral exam, it is necessary to pass both the practical exam, and the written exam.

The oral exam includes the most important, integrative units of pediatrics. Throughout 5 questions, integrative knowledge is examined, which is essential for understanding the whole subject and is the basis for good medical practice.

The final grade is the average of the grade of the written and oral exam, that is: $(\text{Written} + \text{Oral})/2$.

Who can NOT access the final exam: Students who missed 30 % or more teaching hours. Such a student cannot take the final exam, i.e., he/she must re - enroll the course in the following academic years.

Exam Terms: 28.1.2025. (written exam from 9.00 am. to 11 am.; the oral exam will be held on the same day after the test results announcement).

COURSE SCHEDULE

Pediatrics

Academic year: 2024./2025.

Study: Medicine

Course Coordinator: Marija Šandrk Beslać, MD, PhD

Date	Time	Title of Lectures (L) / Seminars (S) / Practicals (P)	Teaching	Literature	Lecturer
27.11.2024.	8.30-13.00	(P) Pediatric Clinic		-	Dr. Iva Mandić (IM)
	13.30-14.15	(L) Normal Growth and Development	On-site	p 11-13; 14-16; 270-273; 650-651 book 1, p 37-46; 198-202 book 2	Prim. dr. sc. Marija Šandrk Beslać (MSB)
	14.20-15.05	(S) Evaluation of the Well Child	On-site	p 16-27 book 1, p 46-51 book 2	MSB
	15.30-16.15	(L) Paediatric Nutrition and Nutritional Disorders	On-site	p 99-104; 109-112 book 1, p 214-224; 228-231 book 2	MSB
	16.20-17.05	(S) Vitamin and Mineral Deficiencies	On-site	p 112-121 book 1, p 224-229 book 2	IM
28.11.2024.	8.30-13.00	(P) Pediatric Clinic			AK
	13.30-14.15	(S) Inborn Errors of Metabolism	On-site	p 191-216 book 1, p 474-482 book 2	IM
	15.00-15.45	(L) Patterns of Inheritance	On-line	p 169-177 book 1, p 130-138 book 2	Dr. sc. Ljubica Odak (LJO)
	15.50-16.35	(L) Genetic Assessment. Chromosomal Disorders	On-line	p 177-183 book 1, p 126-130; 140-143 book 2	LJO
	16.40-17.25	(S) Approach to the Dysmorphic Child	On-line	p 183-186 book 1, p 138-140 book 2	LJO
29.11.2024.	8.30-13.00	(P) Pediatric Clinic			IM
	13.30-14.15	(S) Behavioral and Psychiatric Disorders	On-site	p 41-47; 52-56; 70-71 book 1, p 61-63; 425-437 book 2	AK
	14.20-15.05	(S) Fluids and Electrolytes	On-site	p 125-144 book 1	Prim. mr. sc. Ivona Letica (IL)
	15.30-16.15	(S) Infectious Disease	On-site	p 361-363; 368-386 book 1, p 259-262; 269-277 book 2	Prim. dr. sc. Borko Rajič (BR)

Date	Time	Title of Lectures (L) / Seminars (S) / Practicals (P)	Teaching	Literature	Lecturer
	16.20-17.05	(S) Immunization and Prophylaxis	On-site	p 363-367 book1, p 285-288 book 2	BR
2.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Neonatology			IM
	13.30-14.15	(S) Gestational Age and Birth Weight Assessment. Adaptation of Newborn to Extrauterine Life	On-site	p 218-222; 227-232 book 1, p 155-157; 162-163; 324 book 2	IM
	14.20-15.05	(S) Physical Examination and Assessment of the Vitality of the Newborn	On-site	P 222; 225; 227-232 book 1, p 157; 163-169 book 2	IM
	16.00-16.45	(L) Respiratory diseases of the Newborn	On-line	p 240-247 book 1, p 185-187 book 2	Doc. dr. sc. Sabina Terzić (ST)
	16:50-17:35	(L) Anaemia and Hyperbilirubinemia of the Newborn	On-line	p 247-254 book 1, p 182-185 book 2	ST
3.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Neonatology			IM
	13.30-14.15	(S) Neonatal Seizures	On-site	p 255-256 book 1, p 193 book 2	AK
	14.20-15.05	(S) Maternal Diseases Affecting the Newborn	On-site	p 235-238 book 1, p 151-154 book 2	AK
	16.00-16.45	(L) Hypoxic-Ischemic Encephalopathy. Intracranial Haemorrhage. Birth injuries	On-line	p 256-258 book 1, p 190-193 book 2	ST
	16:50-17:35	(L) Neonatal Sepsis and Meningitis. Necrotizing enterocolitis	On-line	p 254-255; 258-259; p 177; 187-190 book 2	ST
4.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Neonatology			AK
	13.30-14.15	(S) The preterm infant	On-site	p 246 book 1, p 157, 172-181 book 2	IM
	14.20-15.05	(S) Neonatal Asphyxia and Resuscitation of a Newborn	On-site	p 222-227 book 1, p 157-162 book 2	IM
	16.00-16.45	(L) Congenital Infections	On-line	p 259-264 book 1, p 154-155 book 2	ST
5.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Cardiology			Prim. mr. sc. Vladimir Jegdić (VJ)

Date	Time	Title of Lectures (L) / Seminars (S) / Practicals (P)	Teaching	Literature	Lecturer
	13.30-14.15	(S) Cardiovascular System Assessment	On-site	p 535-540 book 1, p 323-325 book 2	VJ
	14.20-15.05	(L) Rheumatic Fever	On-site	p 408-410; 556 book 1, p 343-345 book 2	Acc. prof. dr. sc. Senka Mesihović Dinarević (SMD)
	15.30-16.15	(L) Acyanotic Congenital Heart Disease	On-site	p 545-548 book 1, 328-332; 338-341 book 2	SMD
	16.20-17.05	(L) Cyanotic Congenital Heart Disease	On-site	p 549-553 book 1, p 332-337; 341-342 book 2	SMD
6.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Cardiology			VJ
	13.30-14.15	(L) Heart Failure	On-site	p 553-555 book 1, p 325-328 book 2	SMD
	14.20-15.05	(L) Arterial Hypertension. Pulmonary hypertension	On-site	p 524-525 book 1, p 346 book 2	SMD
	15.30-16.15	(S) ECG Interpretation	On-site		VJ
	16.20-17.05	(S) Dysrhythmias	On-site	p 542-544 book 1, p 342-343 book 2	VJ
9.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Cardiology			VJ
	13.30-14.15	(S) Cardiomyopathies	On-site	p 556-558 book 1; p 345 book 2	VJ
	14.20-15.05	(S) Myocarditis. Pericarditis	On-site	p 558-560 book 1, p 345 book 2	VJ
	15.30-16.15	(S) Syncope. Chest pain	On-site	p 540-542 book 1, p 343 book 2	VJ
10.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Pulmonology			AD
	13.30-14.15	(S) Respiratory System Assessment	On-site	p 507-513 book 1, p 299-300 book 2	Dr. Ante Damjanović (AD)
	14.20-15.05	(S) Upper Respiratory Tract Infections	On-site	p 391-401; 516-518 book 1, p 300-304 book 2	AD
	16.00-16.45	(L) Cough	On-line	p 509 book 1, p 314-316 book 2	Doc. dr.sc. Ivan Pavić (IP)
	16.50-17.35	(L) Lower Respiratory Tract Infections	On-line	p 401-408 book 1, p 304-307 book 2	IP
11.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Pulmonology			AD

Date	Time	Title of Lectures (L) / Seminars (S) / Practicals (P)	Teaching	Literature	Lecturer
	13.30-14.15	(S) Congenital Anomalies of the Respiratory System	On-site	p 520-524 book 1, p 316; 320 book 2	AD
	14.20-15.05	(S) Allergy Assessment	On-site	p 311-313 book 1; p 292-295 book 2	AD
	16.00-16.45	(L) Asthma	On-line	p 313-322 book 1, p 307-314 book 2	IP
	16.50-17.35	(L) Tuberculosis	On-line	p 452-457 book 1; p 279-281 book 2	IP
12.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Pulmonology			AD
	13.30-14.15	(S) Allergic Rhinitis. Atopic Dermatitis. Adverse Reactions to Foods	On-site	p 323-328; 334-338 book 1, 295-297 book 2	AD
	14.20-15.05	(S) Urticaria, Angioedema, and Anaphylaxis	On-site	p 328-332 book 1, p 95-96; 297-298 book 2	AD
	16.00-16.45	(L) Cystic Fibrosis	On-line	p 526-529 book 1, p 317-320 book 2	IP
13.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Pediatric Neurology			Prof. dr. sc. Igor Prpić (IPR)
	13.30-14.15	(S) Neurology Assessment	On-site	p 16-18; 681-685 book 1, p 26-31; 53-55 book 2	Prim. dr. sc. Ana Boban Raguž
	14.20-15.05	(S) Cerebral Palsy	On-site	p 37-38 book 1, p 56-60 book 2	ABR
	15.30-16.15	(L) Headache and Migraine	On-site	p 685-687 book 1, p 502-505 book 2	IPR
	16.20-17.05	(S) Altered Mental Status	On-site	p 703-711 book 1, p 93 book 2	IPR
16.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Pediatric Neurology			IPR
	13.30-14.15	(L) Seizures. Epilepsy	On-site	p 687-692 book 1, p 505-512 book 2	ABR
	14.20-15.05	(S) Central Nervous System Infections	On-site	p 386-391 book 1, p 262-265 book 2	ABR
	15.30-16.15	(L) Neurodegenerative Disorders	On-site	p 711-714 book 1, p 524-525 book 2	IPR
	16.20-17.05	(L) Neurocutaneous Disorders	On-site	p 714-716 book 1, p 522-524 book 2	IPR

Date	Time	Title of Lectures (L) / Seminars (S) / Practicals (P)	Teaching	Literature	Lecturer
17.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Pediatric Neurology			ABR
	13.30-14.15	(L) Congenital Malformations of the Central Nervous System	On-site	p 716-718 book 1, p 520-522 book 2	IPR
	14.20-15.05	(S) Weakness and Hypotonia	On-site	p 692-700 book 1, p 513-517 book 2	ABR
	15.30-16.15	(S) Ataxia and Movement Disorders	On-site	p 700-703 book 1, p 517-519	ABR
18.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Gastroenterology			AK
	13.30-14.15	(S) Congenital Anomalies of the Gastrointestinal Tract	On-site	p 483-485; 487-490; 492-493 book 1, p 195-197; 238-240; 245-247 book 2	MSB
	15.00-15.45	(L) Digestive System Assessment	On-line	p 467-473 book 1, p 236-237; 240-241 book 2	Doc. dr. sc. Iva Hojsak (IH)
	15.50-16.35	(L) Acute and Chronic Diarrhoea	On-line	p 410-413; 473-475 book 1, p 247-250; 252 book 2	IH
	16.40-17.25	(L) Malabsorption. Coeliac disease	On-line	p 492 book 1, p 249-252 book 2	IH
19.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Gastroenterology			BR
	13.30-14.15	(S) Gastrointestinal Bleeding	On-site	p 476-478 book 1	MSB
	14.20-15.05	(S) Constipation and Encopresis	On-site	p 49-52; 475-476 book 1, p 254-257 book 2	MSB
	16.00-16.45	(L) Gastrointestinal motility disorders. Functional gastrointestinal disorders	On-line	p 480-483; 485-487 book 1, p 241-246; 257-258 book 2	IH
	16.50-17.35	(L) Inflammatory Bowel Disease	On-line	p 490-491 book 1, p 452-454 book 2	IH
20.12.2024.	8.30-13.00	(P) Pediatric Clinic - Department of Gastroenterology			MSB
	13.30-14.15	(S) Cholestasis. Acute Liver Failure	On-site	p 413-416; 494-497 book 1, p 377-380; 382 book 2	MSB
	14.20-15.05	(S) Chronic liver disease	On-site	p 497-501 book 1, p 380-386 book 2	MSB

Date	Time	Title of Lectures (L) / Seminars (S) / Practicals (P)	Teaching	Literature	Lecturer
	15.30-16.15	(S) Pancreatic Diseases	On-site	p 501-503 book 1	MSB
7.1.2025.	8.30-13.00	(P) Pediatric Clinic - Department of Endocrinology and Diabetes			MSB
	13.30-14.15	(S) Endocrinology Assessment	On-site	p 637-639 book 1	MSB
	14.20-15.05	(L) Diabetes Mellitus	On-site	p 639- 646 book 1, p 455-464 book 2	MSB
	15.30-16.15	(S) Hypoglycemia	On-site	p 646-650 book 1, p 464-465 book 2	MSB
	16.20-17.05	(S) Obesity	On-site	p 104-109 book 1, p 231-234 book 2	MSB
8.1.2025.	8.30-13.00	(P) Pediatric Clinic - Department of Endocrinology and Diabetes	On-site		MSB
	13.30-14.15	(L) Thyroid Disease	On-site	p 663-668 book 1, p 465-466 book 2	MSB
	14.20-15.05	(S) Parathyroid Disorders	On-site	p 669-670 book 1, p 472-473 book 2	MSB
	15.30-16.15	(S) Disorders of Sexual Development	On-site	p 670-674 book 1, p 471-472 book 2	MSB
	16.20-17.05	(L) Disorders of Puberty	On-site	p 656-663 book 1, p 210-213 book 2	MSB
9.1.2025	8.30-13.00	(P) Pediatric Clinic - Department of Endocrinology and Diabetes	On-site		MSB
	13.30-14.15	(L) Adrenal disorders	On-site	p 674-678 book 1, p 468-471 book 2	MSB
	14.20-15.05	(L) Abnormalities of Growth	On-site	p 651-656 book 1, p 203-208; 467-468 book 2	MSB
	15.30-16.15	(S) Central Diabetes Insipidus	On-site	p 133-134 book 1, p 467 book 2	MSB
10.1.2025.	8.30-13.00	(P) Pediatric Clinic - Department of Hematooncology	On-site		BR
	13.30-14.15	(S) Oncology Assessment	On-site	p 595-599 book 1, p 388-389; 402 book 2	BR
	14.20-15.05	(S) Principles of Cancer Treatment	On-site	p 599-603 book 1, p 389-392; 401 book 2	BR

Date	Time	Title of Lectures (L) / Seminars (S) / Practicals (P)	Teaching	Literature	Lecturer
	16.00-16.45	(L) Leukemia. Lymphoma	On-line	p 603-607 book 1, p 392-393; 395-396 book2	Prof. dr. sc. Ernest Bilić (EB)
	16.50-17.35	(L) Solid Tumors	On-line	p 607-613 book 1, p 393-395; 396-400 book 2	EB
13.1.2025.	8.30-13.00	(P) Pediatric Clinic - Department of Hematooncology			BR
	13.30-14.15	(S) Hematology Assessment	On-site	p 563-566 book 1, p 403-404 book 2	BR
	15.00-15.45	(S) Lymphadenopathies	On-line	p 383-386 book 2	EB
	15.50-16.35	(L) Anaemias in children	On-line	p 566-580 , p 404-415 book 2	EB
	16.40-17.25	(L) Coagulopathies and Bleeding Disorders	On-line	p 580-589 book 1, p 415-422 book 2	EB
14.1.2025.	8.30-13.00	(P) Pediatric Clinic - Department of Hematooncology	On-site		BR
	13.30-14.15	(S) Immunological Assessment	On-site	p 289-293 book 1	BR
	14.20-15.05	(S) Blood Component Therapy. Hematopoietic Stem Cell Transplantation	On-site	p 306-308; 589-590 book 1	BR
	16.00-16.45	(L) Lymphocyte Disorders. Neutrophil Disorders. Complement Disorders	On-line	p 293-306 book 1, p 288-290 book 2	EB
15.1.2025.	8.30-13.00	(P) Pediatric Clinic - Department of Nephrology			IL
	13.30-14.15	(S) Nephrology and Urology Assessment	On-site	p 617-620 book 1, p 347-348 book 2	IL
	14.20-15.05	(S) Urinary Tract Infection. Urinary Tract Stones	On-site	p 416-417; 631 book 1; p 352-356; 363 book 2	IL
	15.30-16.15	(S) Enuresis and Voiding Dysfunction	On-site	p 48-49; 631-632 book 1, p 356-357; 432-433 book 2	IL
16.1.2025.	8.30-13.00	(P) Pediatric Clinic - Department of Nephrology			IL
	13.30-14.15	(S) Renal Hypertension	On-site	p 627-628 book 1, p 362 book 2	IL

Date	Time	Title of Lectures (L) / Seminars (S) / Practicals (P)	Teaching	Literature	Lecturer
	15.00-15.45	(L) Congenital and Developmental Abnormalities of the Urinary Tract	On-line	p 628-630 book 1; p 348-352 book 2	Prof. dr. sc. Andrea Cvitković Roić (ACR)
	15.50-16.35	(L) Nephrotic Syndrome and Proteinuria	On-line	p 620-622 book 1, p 357-360 book 2	ACR
	16.40-17.25	(L) Glomerulonephritis and Hematuria	On-line	p 622-624 book 1, p 360-362 book 2	ACR
17.1.2025.	8.30-13.00	(P) Pediatric Clinic - Department of Nephrology			IL
	13.30-14.15	(S) Hemolytic Uremic Syndrome	On-site	p 624 book 1, p 366 book 2	IL
	14.20-15.05	(S) Chronic Renal Failure	On-site	p 626-627 book 1, p 366-368 book 2	IL
	16.00-16.45	(L) Acute Renal Failure	On-line	p 625-626 book 1, p 363-366 book 2	ACR
	16.50-17.35	(L) Tubulointerstitial Nephritis and Tubulopathies	On-line	p 140; 621 book 1, 363 book 2	ACR
20.1.2025.	8.30-13.00	(P) Pediatric Clinic - Department of Intensive Care Unit			AK
	13.30-14.15	(L) Pediatric Advanced Life Support and Cardiopulmonary Resuscitation	On-site	p 147-149 book 1, p 88-90 book 2	Prof. dr. sc. Joško Markić (JM)
	14.20-15.05	(L) Shock	On-site	p 151-154 book 1, 91-96 book 2	JM
	15.30-16.15	(L) Drowning and Burns	On-site	p 157-160 book 1, p 105-107 book 2	JM
	16.20-17.05	(S) Pain management. Sedation and Analgesia	On-site	p 165-166 book 1, p 75-76 book 2	JM
21.1.2025.	8.30-13.00	(P) Pediatric Clinic- Department of Intensive Care Unit			VJ
	13.30-14.15	(S) Poisoning	On-site	p 160-165 book 1, p 107-111 book 2	MSB
	14.20-15.05	(S) Initial Clinical Assessment of the Seriously ill Child	On-site	p 145-147 book 1, p 86-88 book 2	VJ

	15.30-16.15	(S) Respiratory Failure	On-site	p 149-151 book 1, 90-91 book 2	BR
22.1.2025.	8.30-13.00	(P) Pediatric Clinic			AK
	13.30-14.15	(L) Paediatric Rheumatology Clinical Assessment	On-line	p 343-345 book 1	Prof. dr. sc. Marija Jelušić Dražić (MJD)
	14.20-15.05	(L) Rheumatic diseases of childhood	On-line	p 349-356 book 1, p 494-498 book 2	MJD
	15.30-16.15	(L) Childhood vasculitis	On-line	p 345-349 book 1, p 277-279; 346; 361-362 book 2	MJD