



COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
Paediatrics and Neonatology	

Academic staff	Core academic unit(s)
Coordinating: dr. Aušrinė Pliauckienė Other: Lecturers of Clinic of Children Diseases, Institute of Clinical Medicine	Vilnius University, Medical Faculty, Clinic of Children Diseases, Santariskiu str. 7, Vilnius

Study cycle	Type of the course unit
cycle (integrated studies)	Compulsory

Mode of delivery	Semester or period when it is delivered	Language of instruction
Recorded general lectures at VMA, seminars and practical sessions – face-to-face in auditoriums and paediatric/ neonatal departments	Year III, semester V	English

Requisites	
Prerequisites: A student must have completed the following courses: Human anatomy, Human histology, Human Physiology, Biochemistry, Microbiology, Pharmacology, Basic radiology, Genetics, Propaedeutics of Internal medicine, Psychology, Fundamentals of professional communication and Psychosomatics, Skills of practical nursing.	Co requisites (if any): No

Number of ECTS credits allocated	Student's workload (total)	Contact hours	Individual work
5 Credits:	135	66	69
- Paediatrics 3	- 81	- 40	- 41
- Neonatology 2	- 54	- 26	- 28

Purpose of the course unit
Learn and know: <ul style="list-style-type: none"> * The growth and development of a healthy child, age periods and their characteristics, specifics of clinical examination of children of different ages, principles of care and prevention for healthy and sick children, rickets, spasmophilia. * Neonatal maturity, development and clinical assessment, fetal-to-neonatal transition. Diagnosis, differential diagnosis, treatment and prevention of the most common neonatal diseases. * Characteristics and assessment of children's bones, joints, and muscles, diagnosis, treatment, and prevention of paediatric rheumatologic diseases. * Characteristics and assessment of the nervous system and neurodevelopment in children, diagnosis, treatment, and prevention of paediatric neurological diseases. After completing the course, students must be able to assess the growth, psychomotor and speech development of newborns and children of various ages; examine the bones, joints, muscles, and nervous system; understand the

possibilities and methods of laboratory and instrumental investigations; be familiar with transient neonatal conditions and diseases; understand paediatric rheumatologic and neurological diseases across different ages, including their diagnosis, differential diagnosis, treatment, and monitoring principles.

Communication with students: All information related to this study programme (i.e., lecture recordings, teaching materials for practical sessions (if provided by the module lecturers), the course description) will be available on the VMA platform.

For individual inquiries, please contact the coordinating lecturer, dr. Aušrinė Pliauckienė, by email: ausrine.pliauckiene@mf.vu.lt

Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
<p>After successfully completing this course, the student will be able to:</p> <ul style="list-style-type: none"> - Act with integrity and adhere to medical ethics. - Communicate effectively with patients, their parents and guardians, as well as with staff and colleagues. - Independently solve problems and make decisions, work in a team. - Collect, understand, and apply theoretical knowledge; analyze and synthesize information; think critically and evaluate. - Take medical history (anamnesis) when communicating with children of various ages and their relatives and appropriately use the collected data in further patient evaluation. - Objectively examine a newborn, assess maturity, recognize transient conditions and common neonatal diseases, develop a plan for investigation, treatment, and monitoring, evaluate and clinically interpret test results, and provide information to parents and guardians. - Objectively assess the growth, psychomotor and speech development of children of various ages, as well as examine the bones, joints, muscles, and nervous system. - Know the most common paediatric rheumatologic and neurological diseases, recognize, evaluate, and describe their manifestations and course, understand appropriate diagnostic tests, interpret their results clinically, and know the principles of treatment and monitoring; discuss the child's condition with parents or guardians. - Apply evidence-based medical principles in practice and be able to search for reliable information sources. 	<p>Recorded lectures in the VMA, study of recommended literature, independent information search, seminars and practical training in paediatric and neonatal departments, analysis of theoretical material and clinical cases, group discussions, and decision-making.</p>	<p>Assessment of theoretical knowledge and practical skills through presentations, analysis of theoretical material, clinical cases, and decision-making. Evaluation of quizzes and tests. Cumulative assessment of practical work at the end of the course and a structured (programmed) final exam.</p>

Content	Contact hours	Individual work: time and assignments
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	Lectures	Tutorials	Seminars	Workshops	Laboratory work	Internship	Contact hours,	Individual work	Tasks for individual work
<p>1. General Paediatrics</p> <ul style="list-style-type: none"> * Age periods, growth, and physical development of a healthy child. * Care of healthy and sick children. * Principles of specific and non-specific prevention of paediatric diseases, health check-ups. * General methodology for clinical examination of children of different ages. * Rickets; spasmophilia. 	1		2, 3	3			6,3	6	Prepare for practical sessions on child age periods, their characteristic features of growth, development, diseases, and care; prevention of paediatric diseases; health check-ups; principles of clinical examination of children of different ages; rickets; and spasmophilia.
<p>2. Paediatric Rheumatology</p> <ul style="list-style-type: none"> * Characteristics and clinical assessment of children's bones, joints, and muscles; laboratory and instrumental examination methods. * Paediatric rheumatic diseases: diagnosis, treatment, and prevention. * Differential diagnosis of growing pains. * Diagnosis, treatment principles, and prognosis of juvenile idiopathic arthritis in children. * Clinical symptoms, diagnosis, differential diagnosis, treatment, and prognosis of paediatric vasculitis. * Clinical symptoms, diagnostic criteria, differential diagnosis, treatment, and prognosis of systemic connective tissue diseases in children (systemic lupus erythematosus, scleroderma, juvenile dermatomyositis). 	2		5, 7	5			12,7	14	Prepare for practical sessions on the child's musculoskeletal system (bones, joints, and muscles), its physiology and examination; paediatric rheumatic diseases including juvenile idiopathic arthritis, vasculitis, and systemic connective tissue diseases in children (systemic lupus erythematosus, scleroderma, juvenile dermatomyositis); as well as growing pains—their clinical symptoms, diagnosis, treatment, and prevention.
<p>3. Paediatric Neurology and Social Paediatrics</p> <ul style="list-style-type: none"> * Assessment of children's psychomotor and speech development. * Developmental disorders in children, early diagnosis, and early rehabilitation. * Characteristics of the paediatric nervous system and its clinical evaluation; laboratory and instrumental examination methods. * Diagnosis, treatment, and prevention of paediatric neurological diseases, sleep, and developmental disorders. 	5		8	8			21	21	Prepare on the following topics: <ul style="list-style-type: none"> * Key developmental milestones for children's psychomotor and speech skills, developmental disorders, early diagnosis, and early rehabilitation; * Evaluation of neurological status and examination methods.

<ul style="list-style-type: none"> * Congenital malformations of the nervous system in children. * Cerebral palsy and other disorders presenting with motor impairment, hereditary neurological and muscle diseases. * Differential diagnosis of seizures in children, paediatric epilepsy, acute symptomatic seizures, febrile seizures, and non-epileptic events. * First aid during a seizure. 									<ul style="list-style-type: none"> * Congenital malformations and developmental anomalies of the paediatric nervous system. * Diagnosis, treatment, and prevention of paediatric neurological diseases, sleep and developmental disorders; etiology, pathogenesis, diagnosis, treatment, and rehabilitation principles of cerebral palsy; manifestations and treatment principles of hereditary neurological and muscular diseases in children. * Etiology, pathogenesis, diagnosis, treatment, and emergency care of paediatric epilepsy, acute provoked seizures—especially febrile seizures—status epilepticus, and non-epileptic paroxysmal events in children.
<p>4. Neonatology:</p> <ul style="list-style-type: none"> * Neonatal maturity and its assessment according to gestational age. * Physical development of the newborn and its evaluation (growth charts, vital signs). * Fetal-to-neonatal transition (thermoregulation, respiratory and circulatory changes, jaundice and other skin changes, peculiarities of renal and gastrointestinal function, hormonal crisis). * Newborn screening for metabolic diseases and genetic disorders. * Newborn screening tests: OAE (otoacoustic emissions) test for congenital hearing loss, red-eye reflex, pulse oximetry. * Diagnosis, differential diagnosis, treatment, and prevention of neonatal diseases (congenital infections – TORCH, early- and late-onset sepsis, haemolytic disease of the newborn, haemorrhagic disease, diabetic fetopathy). * Fetopathies/embryopathies, teratogens. 	8		10	8			26	28	<p>Students are expected to acquire knowledge of:</p> <ul style="list-style-type: none"> *Physiology of the healthy newborn *Characteristics of the preterm newborn *Fetal-to-neonatal transition *Congenital pathologies *Principles of neonatal resuscitation <p>During practical sessions, students will be able to:</p> <ul style="list-style-type: none"> *Perform a clinical examination of a healthy newborn

<ul style="list-style-type: none"> * Preterm newborn and problems related to prematurity. * Physiological neonatal reflexes. * Perinatal hypoxia. * Initial neonatal resuscitation, 2025 neonatal resuscitation guidelines 								<ul style="list-style-type: none"> *Assess physiological neonatal reflexes *Apply basic neonatal resuscitation techniques using mannequins <p>Teaching Methods:</p> <ul style="list-style-type: none"> *Bedside teaching and supervised clinical practice *Simulation-based training (neonatal resuscitation using mannequins in the simulation room).
Total	16		26	24			66	69

Assessment strategy	Weight %	Deadline	Assessment criteria
<p>The student's theoretical knowledge, work with patients, and ability to apply knowledge in real or simulated clinical situations are assessed.</p> <p>Assessment methods:</p> <ul style="list-style-type: none"> * Written tests; * Open-ended questions; * Analysis and presentation of theoretical material; * Solving clinical cases and tasks; * Presentation and analysis of patients. 	40	During practical work sessions	<p>Assessment of students' theoretical and practical knowledge and skills is conducted during each practical session. Written assessments include tests, open-ended questions, and clinical case analyses or presentations.</p> <p>The evaluation of written assessments is based on the number of correct answers and their respective weighting, with questions of varying difficulty assigned different point values.</p> <p>Scores obtained during practical sessions and seminars are not rounded; fractional scores are recorded to two decimal places (e.g., 0.25 points).</p> <p>At the end of the cycle, the points are summed, with a maximum possible score of 40.</p> <p>This assessment contributes to the cumulative final score.</p>
Computerised exam at the end of module	60	At the end of Practices on the appointed day.	<p>A computer-based electronic exam (in a specially designed database) consists of 60 theoretical and clinical test questions, each worth 1 point.</p> <p>The evaluation strategy is based on the number of correctly and incorrectly selected answer options (correct selections are added, incorrect selections are subtracted). The resulting scores are not rounded; fractional scores are recorded to two decimal places (e.g., 0.56 points).</p> <p>The maximum possible score for the examination is 60 points.</p> <p>If a student does not achieve at least 50% of the maximum score for the exam (i.e., 30 points), the course is not passed.</p>
Final evaluation	100	After the exam	<p>The final evaluation is the sum of the cumulative practical work scores and the exam score.</p> <p>The final evaluation is the sum of the cumulative practical work scores and the examination score.</p>

		<p>It is rounded in accordance with standard mathematical rounding rules.</p> <p>The maximum total course evaluation is 100 points, corresponding to a grade of 10.</p> <table border="1"> <thead> <tr> <th>Final score (points)</th> <th>Final evaluation</th> </tr> </thead> <tbody> <tr> <td>100-92</td> <td>10 (excellent)</td> </tr> <tr> <td>91-85</td> <td>9 (very well)</td> </tr> <tr> <td>84-75</td> <td>8 (good)</td> </tr> <tr> <td>74-65</td> <td>7 (average)</td> </tr> <tr> <td>64-55</td> <td>6 (satisfactory)</td> </tr> <tr> <td>54-50</td> <td>5 (weak)</td> </tr> <tr> <td><50</td> <td>4 (unsatisfactory)</td> </tr> </tbody> </table>	Final score (points)	Final evaluation	100-92	10 (excellent)	91-85	9 (very well)	84-75	8 (good)	74-65	7 (average)	64-55	6 (satisfactory)	54-50	5 (weak)	<50	4 (unsatisfactory)
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Author (-s)	Publishing year	Title	Issue of a periodical or volume of a publication	Publishing house or web link
Required reading				
Lecturers of the module	2026	Lectures and Other Materials		VMA
Robert M. Kliegman	2024	Nelson Textbook of Pediatrics	22 st edition	Available throw VU Subscribed Scientific Databases – ClinicalKey; https://www.clinicalkey.com#!/browse/book/3-s2.0-C20161017121 https://virtualbiblioteka.vu.it/
Tom Lissauer Will Carroll	2022	Illustrated Textbook of Paediatrics'	6 th edition	Available throw VU Subscribed Scientific Databases – Elsevier; https://www.clinicalkey.com#!/browse/book/3-s2.0-C20190011636 https://virtualbiblioteka.vu.it/
Lissauer, Tom Fanaroff, Avroy A Miall, Lawrence Fanaroff, Jonathan	2015	Neonatology at a glance	3rd edition	Available throw VU Subscribed Scientific Databases – Elsevier; https://virtualbiblioteka.vu.it/
Recommended reading				
Mark H. Swartz MD	2021	Textbook of Physical Diagnosis. Basic chapter 24, with references to other parts of textbook		Available throw VU Subscribed Scientific Databases -ClinicalKey; https://www.clinicalkey.com#!/browse/book/3-s2.0-C20180009366
	2026	ClinicalKey		Available throw VU library
	2026	Medscape		Available throw VU library
	2026	UpToDate		Available throw VU library
	2026	Website of American Association of Paediatrics		www.aap.org
	2026	Epilepsy Foundation		https://www.epilepsy.com/

	2026	Epilepsies in children, young people and adults (NICE guideline)		https://www.nice.org.uk/guidance/ng217
	2026	Epilepsy (International League Against Epilepsy (ILAE) guidelines)		https://www.ilae.org/guidelines
	2026	Cerebral palsy in children and young people (NICE guideline)		https://www.nice.org.uk/guidance/qs162
NOTE: Including Open Educational Resources in the reading list is recommended				

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