



COURSE UNIT DESCRIPTION

Course unit title	Code
Paediatric surgery	

Lecturer(s)	Department(s)
Coordinating: pr. Gilvydas Verkauskas Others: lecturers from the Clinic of Gastroenterology, Nephrourology and Surgery, Department of Pediatric Surgery	Vilnius University, Faculty of Medicine, Institute of Clinical Medicine, Clinic of Gastroenterology, Nephrourology and Surgery, Department of Pediatric Surgery, Santariškių st. 7, Vilnius

Cycle	Level of the course unit	Type of the course unit
cycle (integrated studies)	-	Compulsory

Mode of delivery	Period of delivery	Language of instruction
Lectures and seminars in classrooms, practical tasks at the Department of Paediatric Surgery	semester VI;	English

Prerequisites and corequisites	
Prerequisites: A student must have completed the following courses: Human anatomy, Human histology, Human physiology and Genetics, Microbiology, General medicine propaedeutics, Radiology, Pathology, Anaesthesiology and Intensive care, General Surgery, Neonatology	Corequisites (if any): none.

Number of ECTS credits allocated to the course unit	Total student's workload	Contact hours	Self-study hours
2	54	26	28

Purpose of the course unit		
Students should learn the methods of clinical investigation, diagnosis, classification and principles of the emergency medical aid and surgical treatment in cases of main paediatric surgical diseases, congenital anomalies and trauma. Graduates will be able to make investigation plan, evaluate radiological and laboratory data, establish the diagnosis and know the principles of surgical management. Communication with students will be maintained by VLE.		
Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
Generic competences At the end of the study program graduate will be able:		
To act fairly and according to ethical obligations, to think critically and self-critically, to be creative, initiative, to pursue his/her own aim, to communicate with others.	Lectures (e-learning), individual search for information, seminars in classrooms, practical tasks at the Department of Pediatric Surgery,	Continuous assessment of practical tasks presenting, analyzing, discussing clinical cases and making decisions.

To make an assessment within the scope of one's competence and, if necessary, ask for help, to solve problems, to make judgments, to work with specialists of other fields. To analyze and synthesize, to use knowledge in practice.	clinical case analysis and discussion within a group.	Assessment of preparation and control tests.
Subject-specific competences At the end of the study program graduate will be able:		
To obtain medical history, epidemiological anamnesis from children of various age and their relatives. To carry out physical examination of children of various age. To recognize, assess and describe the manifestation, course and severity of clinical signs of children's infectious and surgical diseases; to order required tests and interpret their results; to carry out differential diagnostics and to prepare the relevant patient monitoring plan; to discuss the child's disease and condition with his parents or guardians.	Lectures (e-learning), individual search for information, seminars in classrooms, practical tasks at the Department of Pediatric Surgery, examining and discussing the patients. Solving real and simulated clinical situations. Preparing, solving and discussing tests. Taking part in ward rounds and patient discussions. After each topic, there is an individual oral or written test, or the solution of clinical situations at the discretion of the topic's teacher.	The final assessment is an exam on the VU VLE platform (50 test questions). A ten-point assessment system is used to assess knowledge, abilities and skills. The exam is allowed to be taken after attending the lectures scheduled in the plan and all the exercises and seminars during the semester in accordance with the procedure established by the MF of VU, submitted and defended all written works and tests in accordance with the procedure established in the Department.
To administer adequate and appropriate treatment according to child's age and to assess the effectiveness of the treatment. To diagnose urgent pediatric surgical diseases: history taking, clinical investigation, evaluation of investigational data, surgical indications, preoperative work-up, and principals of surgery.	Attendance at lectures is recommended, attendance at seminars and exercises is mandatory. Student attendance is checked by the lecturer teaching the subject. Students must coordinate all changes in the schedule of attendance with the Studies Department and missed practice and seminars have to be resolved according to the procedure established by the Department of Paediatric Surgery. If more than 25% of exercises/seminars are missed, they will not be credited.	
To maintain confidentiality, apply ethical principles in clinical practice. To understand the principles of efficient communication in medical practice: to communicate with patients, their relatives and specialists from children's educational institutions.		
To apply principles, methods and knowledge of biomedical sciences in medical practice. To learn using computer and other methods of medical information search.		

Topics	Contact work hours						Time and tasks of self-study	
	Lectures	Consultations	Seminars	Practice	Laboratory work	Practical training	Total contact hours	Self-study
								Tasks

1. Urgent pediatric surgical diseases of abdominal organs: acute appendicitis (differences in small children), acute bowel obstruction (intussusception, bowel adhesions, incarcerated hernia), abdominal trauma. Foreign bodies of gastrointestinal tract.	2		2	1			5	4	To prepare theoretically for practical training and seminars. To learn methods of clinical investigation, interpretation of investigational data.
2. Congenital bowel obstruction: esophageal atresia, duodenal atresia, atresia of small bowel, recta atresia, Hirshprung disease, pyloric stenosis, rotational anomalies, omphalocele.	1		1	1			3	4	To prepare theoretically for practical training and seminars. To learn methods of clinical investigation, interpretation of investigational data.
3. Congenital anomalies of the respiratory system (diaphragmatic hernia, congenital anomalies of lungs and bronchi). Foreign bodies of respiratory system. Pediatric abdominal hernias.	1		1	1			3	3	To prepare theoretically for practical training and seminars. To learn methods of clinical investigation, interpretation of investigational data.
4. Purulent diseases of children: acute hematogenous osteomyelitis, dermal and sub dermal infections, destructive pneumonia and its complications.	1		2	1			4	4	To prepare theoretically for practical training and seminars. To learn methods of clinical investigation, interpretation of investigational data.
5. Congenital anomalies of urinary tract (urinary obstruction, vesicoureteral reflux, bladder exstrophy). Urinary tract infection and stone disease.	1		1	1			3	4	To prepare theoretically for practical training and seminars. To learn methods of clinical investigation, interpretation of investigational data.
6. Congenital anomalies of genital organs (hypospadias, epispadias, cryptorchidism, phimosis, hydrocele, testicular torsion, varicocele). Urological oncology (nephroblastoma).	1		1	1			3	3	To prepare theoretically for practical training and seminars. To learn methods of clinical investigation, interpretation of investigational data.
7. Pediatric oncology. Most frequent benign (hemangioma, lymphangioma, teratoma) and malignant (neuroblastoma, hepatoblastoma, teratoblastoma) tumors.	1		1	1			3	3	To prepare theoretically for practical training and seminars. To learn methods of clinical investigation, interpretation of investigational data.
8. Evaluation of oral presentations of clinical case or written work on the module's topic			1	1			2	3	Prepare a clinical case presentation or paper according to approved written work guidelines.
Total (Pediatric surgery)	8		10	8			26	28	

Assessment strategy	Weight (points)	Assessment period	Assessment criteria
Written final exam	100 %	After the course according to the schedule	The exam is held on the VU VLE platform. The exam test consists of 50 questions: 30 questions with one correct answer, 10 more complex questions with one correct answer and 10 clinical situations also with one correct answer. A correct answer is evaluated with 1 point. Points are not rounded. Evaluation is based on a 10-point system. 10 points – 50-47 correct answers, 9 points – 46-43 correct answers, 8 points – 42-39 correct answers, 7 points – 38-35 correct answers, 6 points – 34-30 correct answers, 5 points – 29-25 correct answers, 0-4 points – unsatisfactory assessment, less than 50 percent correct answers.

Author	Year of publication	Title	No of periodical or vol. of publication	Publication place and publisher or Internet link
Required reading				
Red. Raugalė A.	2007	Vaikų ligos	V tomas	Vilnius, Vilniaus universiteto leidykla
Red. R. Kėvalas	2018	Pediatrija		Kaunas: UAB „Vitae Litera“
Recommended reading				
A.G. Coran, A. Caldamone, N.S. Adzick, T. M. Krummel, J.M. Laberge, and R. Shamberger	2012	Pediatric Surgery		Mosby
P.Puri, 4th ed.	2017	Newborn Surgery		CRC Press
Steven G. Docimo, Douglas Canning, Antoine Khoury, Joao Luiz Pippi Salle	2018	The Kelalis--King--Belman Textbook of Clinical Pediatric Urology 6th edition		CRC Press
M. Lima	2017	Pediatric Digestive Surgery,		Springer International Publishing Switzerland
Websurg, the Online University of IRCAD				https://websurg.com/en/
The European Board of Paediatric Surgery (EBPS) and European Pediatric Surgical Association (EUPSA) created EPSITE				https://www.paediatricsurgeryexam.org/index.php/training-courses
Global Initiative for Children's Surgery				https://www.globalchildrenssurgery.org/