

1.	Title of the subject	<b>PEDIATRICS</b>			
2.	Code	OM 511			
3.	Study program	General Medicine			
4.	Organizer of the study program (unit, institute, division, department)	Ss. Cyril and Methodius University of Skopje- Medical faculty Division of General Pediatrics			
5.	Level of education (first or second cycle)	Integrated cycle			
6.	Academic year/semester	fifth/IX fifth/X	7.	Number of EKTS credit points	11
8.	Teacher	Chairman of the Pediatrics Division Prof. Dr. Kata Martinova *The classes are conducted by all the members of the Pediatrics division			
9.	Enrollment requirements	The first part of the professional exam should be passed  The criteria for enrollment in the VII semester should be met			
10.	<b>Objectives of the program (competencies):</b> <ol style="list-style-type: none"> <li>1. The students should gain basic knowledge, which will be applied in a clinical setting in order to handle normal and abnormal growth and development (physical, physiological, psycho-social) of the children from birth to adolescence.</li> <li>2. The student should be able to provide basic pediatric care to children from different age groups (neonates, infants, toddlers, children and adolescents).</li> <li>3. The students should gain the appropriate skills and knowledge necessary for the proper handling of the most common and important diseases and urgencies in Pediatrics</li> <li>4. The students should gain knowledge for professional conduct and communicational abilities necessary for problem-solving (problem solving skills).</li> <li>5. The students should be equipped for life-long learning , necessary for their further professional development</li> </ol>				

11.	<p><b>Contents of the program:</b></p> <p><b>Theoretical training:</b></p> <p><b>1. Social and preventive pediatrics</b></p> <p>Social-economical factors that influence children's health. Vital statistics for the children's health in R. of Macedonia. Organization of the health-care system, National preventive programs, mandatory immunizations</p> <p><b>2. Growth and development</b></p>
-----	--

Normal growth and growth charts, abnormalities of the growth and development. Evaluation of various developmental milestones and discovering of developmental abnormalities.

**3. Care for the sick child**

Primary and hospital care for the children. Ethics. Basics of evidence based medicine.

**4. Pediatric emergencies/ accidents/ poisonings**

Principles of emergency pediatrics: respiratory, cardiovascular, neurologic and metabolic emergencies, poisonings and serious trauma

**5. Genetics and dysmorphism**

Chromosome disorders, monogenic disorders, multifactorial inheritance and dysmorphism

**6. Perinatology/ Neonatology**

A normal newborn, neonatal resuscitation, growth of the newborn, neonatal seizures, respiratory disturbances, jaundice, metabolic disorders, hematologic disorders, infections, birth trauma and urgent surgical conditions.

**7. Growth and puberty**

Disorders of the pubertal development

**8. Nutrition**

Nutritional needs, breastfeeding , formula feeding , nutritional disorders

**9. Nephrology**

Nephrotic syndrome, glomerulonephritis, urinary tract infection, renal failure, enuresis, hypertension

**10. Cardiology**

Rheumatic fever, Congenital heart diseases, heart failure, infective endocarditis, arithmias

**11. Respiratory system**

Upper and lower respiratory tract diseases, bronchial asthma, chronic pulmonary diseases, cystic fibrosis

**12. Infections/ Allergies/Immunity**

Conditions accompanied by fever, Specific infections, anaphylactic reactions, urticaria (hives), allergies, immunizations, immunodeficiency disorders

**13. Endocrinology**

Diabetes mellitus, hypoglycemia, hypothyroidism, hyperthyroidism, disorders of the parathyroid glands, adrenal cortical insufficiency, Cushing's syndrome

**14. Metabolism**

Inborn errors of the metabolism, neonatal screening, gastroenteritis, dehydration and re-hydration, acid-base balance (interpretation and disorders)

**15. Neurology**

Mental retardation, CNS infections, cerebral palsy, hydrocephalus, microcephaly, neuromuscular disorders

**16. Gastroenterology/ Hepatology**

Abdominal pain, abdominal mass, malabsorption, inflammatory bowel diseases, liver diseases, cirrhosis and portal hypertension, hepato-splenomegaly.

**17. Hematology/Oncology**

Anaemias , hemorrhagic syndrome, the most common malignancies in children **18.**

**Behavioral pediatrics**

Behavioral and social problems in childhood, ethic and professional behaviors relevant for the pediatricians

**19. Rheumatology**

	<p>Evaluation of the musculo-skeletal system, variations of the normal posture, diseases of the hip, knee and foot, diseases of the spine, back and neck, arthritis</p> <p><b>20. Skin</b> Rash in the neonatal/infant period, infections and infestations, rash during systemic diseases</p> <p><b>21. Adolescent medicine</b> Communication with adolescents , common health problems <b>Practical teaching :</b></p> <p>Mastering of clinical skills and the practical implementation of the acquired theoretical knowledge</p>			
12.	<p><b>Methods of studying:</b> interactive lectures, clinical exercises and exercises in primary health-care, problemoriented clinical scenarios, practicing of skills on mannequins, a project exercise, problem oriented seminars (case based)</p>			
13.	Total available amount of hours	330 hours		
14.	Distribution of the available hours	<p>180 hours of lectures, exercises and seminars</p> <p>150 hours of home learning</p>		
15.	Types of educational activities	15.1	Lectures- theoretical education	64 hours
		15.2	Exercises(laboratory, clinical), seminars, team work	90 hours Seminars 26 hours
16.	Other forms of activities	16.1	Project exercises	hours
		16.2	Stand-alone assignments	hours
		16.3	Home learning	150 hours
17.	Method of evaluation score points			

17.1	Test	<p><b>min.-max.</b>  <b>Continuous evaluation * 3: score points 30-51</b></p> <p>*Continuous control of the gained knowledge (colloquiums): 3 written tests (multiple choice)  All the fields in Pediatrics are covered:</p> <p><b>Colloquium 1:</b> neonatology, nutrition, genetics, immunology, pulmonology , 10-17 score points  <b>Colloquium 2:</b> endocrinology, emergency pediatrics, metabolic diseases/disorders, nephrology, gastroenterology, 10-17 score points  <b>Colloquium 3:</b>hemato-oncology, neurology, cardiology, 10-17 score points</p>
	Final exam	<p><b>min.-max.</b>  Score points 20-33  <b>The final integrative exam consists of :</b> Taking of the patient's medical history, differential diagnosis, physical exam, skill according to the catalog of skills + an integrated oral exam where the integrated knowledge</p>

		<p>necessary for the understanding of the plenum of the subject and the medical practice is evaluated . <b>The exam is conducted on one real patient and one virtual case (practical and oral part)</b>  <b>min.-max.20-33 score points</b></p> <p><b>10=30-33 score points, 9=27-29 score points, 8=24-26 score points, 7=21-23 score points, 6=18-20 score points</b></p>
17.2	Seminar assignment/project (presentation : written or oral)	<p><b>min. - max.</b>  <b>Seminars*points30 - 40</b></p>
17.3	Active participation	<p><b>min.-max</b>  Theoretical teaching score points2 - 6  Practical teaching score points 8 - 10</p>

18.	Criteria for evaluation (points/score)	from 59 score points	5 (five) F		
		from 60 to 68 score points	6 (six) E		
		from 69 to 76 score points	7 (seven) D		
		from 77 to 84 score points	8 (eight) C		
		from 85 to 92 score points	9 (nine) B		
		from 93 to 100 score points	10 (ten) A		
19.	Criteria for completing the seminar and obtaining the right to a final exam	<p><b>Conditional criteria:</b></p> <p>To complete the seminar the student is obliged to attend and take active participation in the seminars, also to achieve the necessary score minimum</p> <p>To obtain the right to a final exam the student is obliged to pass the planned continuous evaluations or to score a 30% minimum of the total amount of points, wherein during the exam session first he must pass the continuous evaluations he hasn't passed and then go to a final exam</p> <p>The score for the subject is formed according a table of scores, which on the other hand is formed according to the sum of the score points from all the activities, continuous evaluations and the final exam</p>			
20.	Language on which the education is conducted	Macedonian			
21.	Methods for evaluating the quality of the education	Anonymous evaluation by the students of the subject, the teachers and the collaborators who participate in the education			
22.	Literature				
	22.1	Mandatory literature			
No		Author	Title	Publisher	Ye

					ar
--	--	--	--	--	----

		1	<a href="#">R. Kliegman</a> , B. <a href="#">Stanton</a> , <a href="#">J. St. Geme</a> , <a href="#">N. Schor</a> , <a href="#">R. Behrman</a>	Nelson Textbook of Pediatrics, 19th edition	Elsevier Health Sciences	2011
		2	Dushko Mardeshich	Pediatrics	School book, Zagreb	2003
			T.Lissauer, G. Clayden	Illustrated Textbook of Pediatrics	Mosby Elsevier	2011
		3	Kuzmanovska D. Grujovska S.	Physical Diagnosis in Pediatrics	Medical Faculty, USCM	2011
		Additional literature				
		No	Author	Title	Publisher	Year
	22.2	1	Mary Rudolph, Tim Lee, Malcolm Leven	Pediatrics and Children's health (translation)	Ars Lamina-Skopje (A project of the GOM)	2012