Univerza v Mariboru
Medicinska fakulteta

UČNI NAČRT PREDMETA / COURSE SYLLABUS			
Ime predmeta:	**Izbrana poglavja iz pediatrije**		
Course title:	**Chosen Chapters in Paediatrics**		
Študijski program in stopnja Study programme and cycle	**Študijska smer Study option**	**Letnik Year of study**	**Semester Semester**
Biomedicinska tehnologija/3. stopnja		**2**	**3 ali 4**
Biomedical Technology/3rd Degree			

Vrsta predmeta (obvezni ali izbirni) / Course type (compulsory or elective)	Izbirni Elective
Univerzitetna koda predmeta / University course code:	

Predavanja Lectures	**Seminar Seminar**	**Vaje Tutorial**			**Klinične vaje Clinical training**	**Druge oblike študija Other forms of study**	**Samost. delo Individual work**	**ECTS**
		10						
15	**20**	**AV**	**LV**	**RV**			**135**	**6**

Nosilec predmeta / Course coordinator:	Prof. dr. Nataša Marčun Varda

Jeziki /Languages:	**Predavanja / Lectures:**	Slovenščina/Slovene
	Vaje / Tutorial:	Slovenščina/Slovene

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	**Prerequisites for enrolling in the course or for performing study obligations:**

Vsebina (kratek pregled učnega načrta):	**Content (syllabus outline):**
Študentje se bodo naučili 2-dimenzionalno (2D) in spoznali 3-dimenzionalno (3D) ultrazvočno diagnostiko v pediatrični nefrologiji (vključno z uporabo v hipertenziologiji). Obvladali bodo praktična načela ultrazvočnega diagnosticiranja pri okužbah sečil (ultrazvočni mikcijski cistogram), ledvičnih malformacijah in pri cističnih ledvičnih boleznih. Naučili se bodo tudi ključnih veščin v ultrazvočni diagnostiki sečil. Seznanili se bodo z nekaterimi novimi diagnostičnimi in terapevtskimi možnostmi na področju pediatrične nefrologije in pediatrije, vključno z biološkimi zdravili.	Students will learn of 2-dimensional (2D) and recognize 3-dimensional (3D) ultrasound diagnostics in paediatric nephrology (hypertensiology included). In addition they are going to learn the practical principles of ultrasound imaging in urinary tract infections (ultrasound voiding cystogram), renal malformations and renal cystic disease. In addition, students will get the key skills in renal paediatric ultrasound. Finally, they will become acquainted with some new diagnostic and therapeutic possibilities in the field of paediatric nephrology and paediatrics, including biological medications.

Temeljni literatura in viri / Reading materials:

- Marcdante K, Kliegman RM, Schuh AM, eds. Nelson: Essentials of Pediatrics. 9th ed. Philadelphia: Elsevier; 2022.

- Kliegman R, St. Geme J, eds. Textbook of Pediatrics. 21th ed. Philadelphia, London, Toronto, Montreal, Sydney, Tokyo: W.B. Saunders Company; 2019.
- Riccabona M, ed. Pediatric Urogenital Radiology. 3rd ed. Cham: Springer International Publishing; 2018.
- Riccabona M, ed. Imaging in Neonates. Cham: Springer Nature; 2023.
- Bunik M, Hay WW, Levin MJ, Abzug MJ, eds. Current Diagnosis & Treatment Pediatrics. 26th ed. New York: McGraw Hill; 2022.
- Rees L, et al, eds. Paeditric Nephrology. 3rd ed. Oxford: Oxford University Press; 2019.
- Emma F, Goldstein SL, Bagga A, Bates CM, Shroff R, eds. Pediatric Nephrology. 8th ed. Cham: Springer Nature; 2022.
- HERTIŠ PETEK, Tjaša, MARČUN-VARDA, Nataša. Childhood cardiovascular health, obesity, and some related disorders: insights into chronic inflammation and oxidative stress. International journal of molecular sciences. 2024, vol. 25, issue 17, [article no.] 9706, str. [1]-17, ilustr. ISSN 1422-0067. https://doi.org/10.3390/ijms25179706, https://www.mdpi.com/1422-0067/25/17/9706, DOI: 10.3390/ijms25179706. [COBISS.SI-ID 206726403]

Cilji in kompetence:	**Objectives and competences:**
Razumevanje osnovnih in praktičnih načel 2D - in 3D - ultrazvočne diagnostike v pediatrični nefrologiji. Obvladanje ključnih veščin v ultrazvočni diagnostiki sečil. Spoznava novih trenutno aktualnih diagnostičnih in terapevtskih možnosti v pediatrični nefrologiji in pediatriji.	Understanding of basic and practical principles of 2D- and 3D- ultrasound diagnostics in paediatric nephrology. Learning the key skills in paediatric renal ultrasound. Comprehension of some new diagnostic and therapeutic possibilities in paediatric nephrology and paediatrics.
Predvideni študijski rezultati:	**Intended learning outcomes:**
Znanje in razumevanje: Znanje in razumevanje ultrazvočne diagnostike v pediatrični nefrologiji kot tudi novih diagnostičnih in terapevtskih možnosti v pediatriji.	**Knowledge and understanding:** Knowledge and understanding of ultrasound diagnostics in paediatric nephrology as well as new diagnostic and therapeutic possibilities in paediatrics.
Prenosljive/ključne spretnosti in drugi atributi: Ključne veščine v ultrazvočni diagnostiki sečil.	**Transferable/key competences and other abilities:** Key skills in paediatric renal ultrasound.
Metode poučevanja in učenja:	**Learning and teaching methods:**
Predavanja Seminarji Vaje - praktično delo z UZ Samostojno delo	Lectures Seminars Tutorial - US imaging Individual work

Načini ocenjevanja:	**Delež (v %) / Share (in %)**	**Assessment methods:**
Način (pisni izpit, ustno izpraševanje, naloge, projekt)		Method (written or oral exam, coursework, project):
Ustni izpit	**40 %**	Oral exam
Seminarska naloga	**30 %**	Seminar paper
Praktični izpit	**30 %**	Practical exam

Reference nosilca / Course coordinator's references:

MARČUN-VARDA, Nataša, GOLOB JANČIČ, Sonja, MOČNIK, Mirjam. Obesity and body composition in relation to liver and kidney ultrasound elastography in paediatric patients with either hypertension or

chronic kidney disease. Children. Jan. 2024, vol. 11, issue 1, str. [1]-14, ilustr. ISSN 2227-9067. https://doi.org/10.3390/children11010018, https://www.mdpi.com/2227-9067/11/1/18, DOI: 10.3390/children11010018. [COBISS.SI-ID 178823427],

MOČNIK, Mirjam, MARČUN-VARDA, Nataša. Cardiovascular risk factors in children with obesity, preventive diagnostics and possible interventions. Metabolites, ISSN 2218-1989, 2021, vol. 11, issue 8, str. [1]-18, ilustr. https://www.mdpi.com/2218-1989/11/8/551, https://doi.org/10.3390/metabo11080551, doi: 10.3390/metabo11080551. [COBISS.SI-ID 74162179], [JCR, SNIP] kategorija: 1A2 (Z, A1/2); uvrstitev: SCI, Scopus, MBP; tip dela še ni verificiran točke: 46.88, št. avtorjev: 2

MOČNIK, Mirjam, GOLOB JANČIČ, Sonja, MARČUN-VARDA, Nataša. Liver and kidney ultrasound elastography in children and young adults with hypertension or chronic kidney disease. Pediatric nephrology. 2023, vol. 38, str. 3379-3387, ilustr. ISSN 1432-198X. https://doi.org/10.1007/s00467-023-05984-0, https://link.springer.com/article/10.1007/s00467-023-05984-0, DOI: 10.1007/s00467-023-05984-0. [COBISS.SI-ID 151287555],