SYLLABUS ANNEX 2021-2027			
Module/course name:	**Pediatrics Orthopedics**	**Module code**	LK.3.054
Faculty:	**Faculty of Medicine with English Division**		
Major:	Medical		
Specialty:			
Level of study:	I (Bachelor studies) ☐ II (Master studies) ☐ integrated Master studies **X** III (Doctoral studies) ☐		
Mode of study :	full-time **X** part-time (extramural) **X**		
Year of study:	I ☐ II ☐ III ☐ IV **X** V ☐ VI ☐	Semester :	1☐ 2 ☐ 3 ☐ 4☐ 5☐ 6☐ 7 **X** 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐
Module/course type:	obligatory **X** elective ☐		
Language of instruction:	Polish ☐ Foreign **X**		

Form of education	**Hours**
Lecture	
Seminar	**6 (e-learning)**
Laboratory class	**24**
E-learning	
Practical class	
Internship	

Student's work input (participation in class, preparation, evaluation, etc.)	**Student's hourly workload**
1. In class	**30**
2. Student's own work including: 1 Peparation for class 2 Preparation for partials and finals	**30**
Summary of the student's workload	**60**
ECTS points for module/course	**2**

Educational objectives: The Course will cover main fields in orthopedics and rehabilitation of movement apparatus. Special attention will be put to pediatric orthopedics and trauma including: congenital and acquired deformities, fractures; post-traumatic, post-inflammatory and neurological disorders and deformities of movement apparatus at children and youths. Illnesses and deformities in upper and lower extremities and in the trunk. Statistics, social problems, psychological problems, economy problems connected with orthopedic surgery will be presented.

In addition the students will learn clinical examinations in orthopedic surgery: body symmetry and proportions, length of extremities, circumferences of extremities, range of joint movements – measurement 'according "0" position'. Analysis of gait & of stand position. Standing and gait - influences on growth and development of spine, clinical tests in orthopedics.

During the Course major problems in pediatric orthopedics will be presented such as: developmental hip dysplasia (DDH), Perthes disease (aseptic necrosis of femur head) coxitis fugax, slipped femoral capital epiphysis, coxa vara congenita; coxa valga, Blount disease; genua valga, club foot (equinus deformity), idiopathic scoliosis, other types of scoliosis – congenital, neurogenic (paralytic), deformities of spine in other syndromes and illnesses, harmful posture habits, paresis plexus brachialis (neuropraxia, aksonotmesis, neurotmesis), spina bifida, cerebral palsy (CP), fractures of upper and lower extremities.

The matrix of learning outcomes for module/ subject with reference to verification methods of the intended educational outcomes and forms of instruction:

Learning outcome code	A student who has obtained a credit for the module/course has the knowledge/skill to:	Methods of verifying the achievement of the intended learning outcomes:	Form of instruction * provide the symbol
F.W1.	knows and understands the causes, symptoms, principles of diagnosing and therapeutic management in relation to most common diseases requiring surgical intervention, with consideration to differences associated with young age, including, in particular: 4) congenital and acquired disorders of movement organs, bone fractures and injuries of children	Written exam with the possibility of using an e-learning platform	Lectures Seminar Labs
F.U1.	assists in a standard surgical procedure, can prepare the operational field and apply local anesthesia to the operated area	Observation during labs	Labs
K01	is sensitive to child's suffering and understands parental anxiety	Observation during labs	Labs
K02	actively participates in classes, behaves appropriately	Observation during labs	Labs
K03	can work in a group	Observation during labs	Labs

EXAMPLES OF METHODS VERIFYING THE ACHIEVEMENT OF THE INTENDED LEARNING OUTCOMES:
In terms of knowledge: Oral exam (*non-standardized, standardized, traditional, problem-based*).
Written exam with the possibility of using an e-learning platform – the student produces/identifies answers)*essay, report; structured short-answer questions /SSQ/; multiple choice questions /MCQ/; multiple response questions /MRQ/; matching test; true/false test; open cloze test* **)**
In terms of skills: practical exam; Objective Structured Clinical Examination /OSCE/; Mini-CEX (mini – clinical examination); completion of a given assignment; project, presentation.
In terms of social competences:
A reflective essay; an extended observation by a supervisor/tutor; 360-degree assessment (feedback from teachers, peers, patients, other co-workers); self-assessment (portfolio included).

Course content: Lectures (delivered in the form of e-learning on the MOODLE platform):

1. Introduction to pediatric orthopedics,
2. bone growth, damage to growth zones and cartilages.
3. DDH, Perthes disease; Slipped capital epiphysis, operative treatment of hip joint;
4. Cerebral palsy, Spina bifida,
5. bone tumors in children;
6. Harmful postures, non-operative & operative treatment of scoliosis, wry neck;
7. Arthroscopy in children,

Seminars (delivered in the form of e-learning on the MOODLE platform)::

1. Pediatric trauma & fractures,
2. Disturbances of axis of extremities, congenital deformities of feet;
3. leg length discrepancy, PRP

Laboratory class:

1. Students will take active part during labs in Ward activities
2. Students will take active part during labs in Outpatient Department activities.

Others (please specify):

1. In specific days some students will also participate in operative procedures in operative theatre.

Obligatory literature for Lectures and seminars:

1. Tachdjian's Pediatric Orthopedics (3 Volume Set) by John Herring, fourth edition 2007
2. Fundamentals of Pediatric Orthopedics, Pizuttillo 1993
3. Netter's Orthopedics by Walter Greene, MD; Hardbound, 512 pages, publication date: JAN-2006; ISBN-13: 978-1-929007-02-8; ISBN-10: 1-929007-02-7
4. Lovell and Winter's Pediatric Orthopedics (2 Volume Set) by Raymond T. Morrissy & Stuart L. Weinstein

Obligatory literature for Lab classes:

1. Tachdjian's Pediatric Orthopedics (3 Volume Set) by John Herring, fourth edition 2007
2. Fundamentals of Pediatric Orthopedics, Pizuttillo 1993
3. Netter's Orthopedics by Walter Greene, MD; Hardbound, 512 pages, publication date: JAN-2006; ISBN-13: 978-1-929007-02-8; ISBN-10: 1-929007-02-7
4. Lovell and Winter's Pediatric Orthopedics (2 Volume Set) by Raymond T. Morrissy & Stuart L. Weinstein

Complementary literature for Lab classes:

1. Campbell's Operative Orthopedics, Four Volume Set by S. Terry Canale
2. Pediatric Orthopedics in Practice Hefti, Fritz 2007, XI, 781 p. 679 illus. (and 1164 individual illus.), 79 cartoons., ISBN: 978-3-540-69963-7
3. Journal of Pediatric Orthopedics Part B – online
4. www.wheelessonline.com

Requirements for didactic aids (multimedia projector, movie camera, etc.)

1. laptop,
2. multimedia projector

Conditions for obtaining a credit for the subject:

Presence during lectures, seminaries and labs. Positive exam outcome.

In the case of classes carried out remotely, students receive a pass for attendance based on confirmed individual logging in to the e-learning platform and completion of assigned tasks.

In the case of classes carried out remotely, it is permissible to conduct the final exam using the e-learning platform. The practical exam will be held on the academic platform. The theoretical (test) exam will be held on the MOODLE academic platform.

The name and address of the department/~~clinic~~, where the course is taught (module/course); contact details (phone number/ email address):

Pediatric Orthopedics & Rehabilitation Department of Medical University of Lublin, University Pediatric Hospital, Gębali 2 Street, VIth floor
81 741 56 53, grzegorz.kandzierski@uszd.lublin.pl

Course Coordinators:

1. prof. Grzegorz Kandzierski,
2. Jarosław Kałakucki MD PhD

Names of the teacher/teachers conducting classes: **Dean's signature**

1. prof. Grzegorz Kandzierski,
2. Łukasz Matuszewski MD PhD,
3. Jacek Karski MD PhD,
4. prof. Michał Latalski MD PhD,
5. Tomasz Raganowicz MD PhD,
6. Jarosław Kałakucki MD PhD,
7. Damian Pietrzyk MD, PhD

8. Andrzej Ciszewski MD, PhD
9. Paweł Jakubowski MD, PhD,
10. Anna Wójcik-Duda MD Phd,
11. Grzegorz Starobrat MD
12. Anna Danielewicz MD PhD,
13. Marcin Romanowicz MD