



Pomeranian Medical University in Szczecin[PUM]
COURSE SYLLABUS
General information

Name of Course: Orthopaedics and Traumatology	
Type of course	<i>Compulsory</i>
PUM Faculty	<i>Faculty of Medicine and Dentistry</i>
Field of study	<i>Medicine</i>
Specialization	<i>Not applicable</i>
Level of study	<i>Long-term studies</i>
Form of study	<i>Full-time, part-time</i>
Year of study /semester	<i>Year 5, semester IX and X, block</i>
Number of ECTS credits allocated	<i>3</i>
Forms of teaching (number of hours)	<i>Lectures 18 hours, seminars 10 hours, practical exercises 32 hours.</i>
Methods of verification and assessment of learning outcomes	<input type="checkbox"/> <i>graded credit:</i> <input type="checkbox"/> <i>descriptive credit</i> <input type="checkbox"/> <i>test credit</i> <input type="checkbox"/> <i>practical credit</i> <input type="checkbox"/> <i>oral credit</i> <i>X – credit without grade</i> <input type="checkbox"/> <i>final exam:</i> <input type="checkbox"/> <i>descriptive credit</i> <i>X- test credit</i> <input type="checkbox"/> <i>practical credit</i> <input type="checkbox"/> <i>oral credit</i>
Head of Unit	<i>Prof. dr. hab. Andrzej Bohatyrewicz, prof. Ph.D.</i>
Teaching assistant professor or person responsible for the course	<i>Prof. dr. hab. Andrzej Bohatyrewicz, prof, Ph.D.</i> <i>email: bohatyrewicz@orthopaedics.pl</i> <i>tel: 914253236</i>

Name and contact details of unit	<i>Chair and Department of Orthopaedics and Traumatology and Motor Oncology SPSK nr 1, tel: 914253236</i>
Unit's website	<i>www.pum.edu.pl</i>
Language of instruction	<i>Polish/English</i>

Detailed information

Course objectives		<p>1. Basic knowledge of orthopaedics and traumatology and musculoskeletal oncology</p> <p>2. Subjective and physical examination of the locomotor system with elements of neurological examination</p> <p>3. Differential diagnosis in orthopaedics and traumatology and musculoskeletal oncology</p> <p>4. Radiological evaluation of orthopaedic and traumatological cases</p> <p>5. Management of musculoskeletal injuries (contusions, sprains, dislocations, fractures, wound care)</p> <p>5. application of basic orthopaedic techniques - plaster immobilisation, skeletal lift</p>
Preliminary requirements in terms of	Knowledge	<p>A student knows:</p> <ol style="list-style-type: none"> 1. Normal and topographical human anatomy 2. Basic concepts in radiology 3. Basic rules of behaviour in the operating theatre 4. Principles of asepsis and antisepsis
	Skills	<p>A student can:</p> <ol style="list-style-type: none"> 1. Perform subjective and physical examination of the patient
	Social competences	<p>A student will demonstrate competency in:</p> <ol style="list-style-type: none"> 1. Conversations with the patient 2. Working in a team 3. High personal culture

LEARNING OUTCOMES

Number of learning outcome	A student who has completed of the COURSE knows/can:	SYMBOL (reference to) learning outcomes for the field of study	Method of verifying the learning outcomes*
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W01	knows and understands the causes, symptoms, principles of diagnosis and therapeutic proceedings in relation to the most common diseases requiring surgical intervention, taking into account the specificity of childhood, including in particular a) acute and chronic abdominal diseases, b) chest diseases, c) diseases of the limbs and head, d) bone fractures and organ injuries	K_F.W1	written test
W02	knows selected issues of pediatric surgery, including traumatology, defects and acquired diseases that are indications for surgical treatment in children	K_F.W2	written test
W03	knows the rules of qualification and performance of basic surgical procedures and invasive diagnostic procedures;	K_F.W3	written test
W04	knows the most common complications of the above mentioned treatments and procedures	K_F.W4	written test
W05	knows the principles of perioperative safety, preparation of the patient for surgery, administering general and local anaesthesia and controlled sedation	K_F.W5	written test
W06	knows postoperative treatment with analgesic therapy and postoperative monitoring	K_F.W6	written test
W07	knows the basics of early cancer detection and the principles of screening in oncology	K_E.W24	written test
U01	assists in a typical surgical procedure, knows how to prepare the operating field and provide local anaesthesia of the operated area	K_F.U1	- observation of student's work - discussion in class
U02	uses basic surgical instruments	K_F.U2	- observation of student's work - discussion in class
U03	comply with the principles of asepsis and antisepsis	K_F.U3	observation of student's work - assessment of the preparation for classes - discussion in class
U04	is able to dress a simple wound, put on and change a sterile surgical dressing	K_F.U4	observation of student's work - assessment of the preparation for classes - discussion in class

U05	assesses the radiographic findings for the most common types of fractures, especially long bone fractures	K_F.U7	observation of student's work - assessment of the preparation for classes - discussion in class
U06	performs temporary immobilization of the limb, selects the type of immobilization necessary for application in typical clinical situations and controls the correct blood supply to the limb after immobilization dressing placement	K_F.U8	observation of student's work - assessment of the preparation for classes - discussion in class
U07	is able to treat external bleeding	K_F.U9	observation of student's work - assessment of the preparation for classes - discussion in class
U08	performs differential diagnosis of the most common diseases of adults and children	K_E.U12	- observation of student's work
U09	suggests individualization of current therapeutic guidelines and other methods of treatment in the case of ineffectiveness or contraindications to standard therapy	K_E.U18	- assessment of the preparation for classes
K01	is aware of the patient's rights	K_K11	- discussion in class
K02	is able to solve the most frequent problems connected with the performance of the profession	K_K12	- observation of student's work
K03	can maintain medical confidentiality	K_K14	- assessment of the preparation for classes
K04	is aware of his/her own limitations and knows when to turn to experts	K_K17	- discussion in class

Table of learning outcomes in relation to the form of classes								
Number of learning outcome	Learning outcomes	Form of the classes						
		Lecture	Seminar	Practical Exercises	Clinical exercises	Simulations	E-learning	Other forms
			x					

	K_F.W1							
	K_F.W2		x					
	K_F.W3		x					
	K_F.W4		x					
	K_F.W5				x			
	K_F.W6			x	x			
	K_F.W24				x			
	K_F.U1			x	x			
	K_F.U2				x			
	K_F.U3			x	x			
	K_F.U4			x	x			
	K_F.U7				x			
	K_F.U8			x				
	K_F.U9				x			
	K_F.U12				x			
	K_F.U18				x			
	K_K11				x			
	K_K12				x			
	K_K14				x			
	K_K17				x			

TABLE OF CURRICULUM

Curriculum number	Curriculum content	Number of hours	Reference to the learning outcomes for the CLASSES
Winter semester, summer semester			
Lectures			
TK01	Scoliosis diagnosis and treatment. Postural defects. Congenital defects of the spine, chest and neck. Scheuermann's disease. Meningo-spinal hernia.	2	W02 K02, K03, K04
TK02	Hip dysplasia - diagnosis and treatment. Painful pediatric hip. Sterile bone necrosis.	2	W02, W04 K02, K03, K04
TK03	Osteoarthritis - diagnosis and treatment. Inflammatory joint diseases. RA. Bechterev's disease. Still's disease. Tuberculosis of the joints. Reconstructive procedures of joints. Osteotomy, joint alloplasty - indications, complications of surgical treatment.	2	W01, W03, W04, W06 K02, K03, K04
TK04	Oncology of the locomotor system. Benign and malignant bone tumors. Treatment and diagnosis of bone tumors.	2	W01, W03, W04 W07 K02, K03, K04
Seminars			
TK01	Classification of injuries. Basic principles of treatment of musculoskeletal injuries. Conservative and surgical treatment of fractures. Complications of fracture treatment. Traumatology of lower limb. Pelvic fractures. Diagnostics and treatment. Arthroscopic treatment.	2,25	W01, W03, W04, W05, W06 K01, K02, K03, K04
TK02	Traumatology of the upper limb. Diagnosis and treatment. Injuries of soft tissues. Open fractures	2,25	W01, W03 U01, U02; U03, U09 K04
TK03	Diseases of the foot and ankle joint in childhood. Osteochondral necrosis of joints. Clubfoot. Basic principles of diagnostics and treatment of childhood injuries.	2,25	W02, W04 K01, K02, K03, K04
TK04	Spinal injuries. Diagnosis and treatment. Neurological examination of patients with spinal injuries.	2,25	W01, W03, W04 U01, U02, U03, U05 K01, K04

Practical Exercises			
TK01	Clinical evaluation and treatment of lower limb injuries and pelvic fractures. Conservative and surgical treatment of fractures. Complications of fracture treatment. Arthroscopic procedures.	4	U01, U02, U03, U04, U05, U06, U07, U08 K01, K02, K03, K04
TK02	Examination of patients with spinal injuries. Diagnosis and treatment. Neurological examination of patients with spinal injuries.	4	U01, U02, U03, U05 K01, K04
TK03	Clinical evaluation and treatment of upper extremity injuries. Evaluation of soft tissue injuries and open fractures	4	U01, U02; U03, U09 K04
TK04	Diagnostics and treatment of patients with degenerative and inflammatory joint disease. Reconstructive treatment of joints.	4	U05 K02, K03, K04
TK05	Examination and diagnosis of patients with bone tumors. Treatment of bone tumors.	4	U05, U08, U09 K02, K03, K04
TK06	Clinical evaluation of patients with postural defects. Differentiation and diagnostics of spinal defects in children.	4	U09 K02, K03, K04
TK07	Principles of diagnosis and treatment of childhood injuries	4	U05 K01, K02, K03, K04
TK08	Evaluation of patients with hip dysplasia and other hip conditions.	4	U05 K02, K03, K04

Recommended Literature:
Reference literature
1. "Ortopedia i Traumatologia Podręcznik dla studentów medycyny" Wydawnictwo Naukowe Exemplum Poznań 2017
2. Gaździk T. (2009) Ortopedia i Traumatologia. Tom 1 -2. PZWL, Warszawa
Complementary literature
1. „Wiktora Degi ortopedia i rehabilitacja. Wybrane zagadnienia z zakresu chorób i urazów narządu ruchu dla studentów i lekarzy”. Redakcja naukowa: Jacek Kruczyński, Andrzej Szulc; Wydawnictwo: Wydawnictwo Lekarskie PZWL, 2015
2. "Urazy kostno-stawowe u dzieci". Autor Krzysztof Okłot Wydawnictwo: Wydawnictwo Lekarskie PZWL, 2008.

Student workload	
Form of student workload (class participation, activity, report preparation, etc.)	Student workload [h].
	In the teacher's assessment (opinion)
Contact hours with the teacher/instructor	48
Preparation for exercise/seminar	8
Reading the indicated literature	8
Writing a lab/exercise report/preparing a project/reference, etc.	-
Preparation for the test/ short test	-
Preparing for the exam	15
Other	
Total student workload	79
ECTS credits	3
Notes	
<p>In order to complete the course and to be allowed to take an examination, students must obtain credit for all classes provided for in the curriculum.</p> <p>In the case of excused absence - the obligation to make up the missed classes after prior arrangement with the assistant responsible for teaching or the assistant who teaches the class</p>	