

Subject name Orthopedics and Traumatology	ECTS Code																
Name of unit teaching the subject THE ZBIGNIEW RELIGA FACULTY OF MEDICAL SCIENCES IN ZABRZE, THE UNIVERSITY OF TECHNOLOGY IN KATOWICE																	
Studies <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 25%;">Field of study</th> <th style="width: 25%;">degree</th> <th style="width: 25%;">mode</th> <th style="width: 25%;">major</th> <th style="width: 25%;">specialization</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">medical</td> <td style="text-align: center;">Uniform Master's</td> <td style="text-align: center;">stationary</td> <td></td> <td></td> </tr> </tbody> </table>		Field of study	degree	mode	major	specialization	medical	Uniform Master's	stationary								
Field of study	degree	mode	major	specialization													
medical	Uniform Master's	stationary															
Surname of instructor (instructors)																	
Type of class, method of implementation and specified number of hours A. Type of class <ul style="list-style-type: none"> • lecture, • exercise classes, • <u>clinical exercise classes</u> • seminars, • design classes • laboratories, • lectureship, • diploma seminar, • professional internship.* <p>* mark where applicable</p> B. Amount of hours in accordance with the approved curriculum 10h lecture + 40h of clinical exercise classes	Amount of ECTS points Description of awarding ECTS points: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 70%;">Activity</th> <th style="width: 30%;">Student workload</th> </tr> </thead> <tbody> <tr> <td>Participation in lectures</td> <td style="text-align: center;">10 hours</td> </tr> <tr> <td>Participation in practical classes</td> <td style="text-align: center;">40 hours</td> </tr> <tr> <td>Preparation for practical classes and colloquiums</td> <td style="text-align: center;">5 hours</td> </tr> <tr> <td>Examination preparation</td> <td style="text-align: center;">5 hours</td> </tr> <tr> <td>Consultations</td> <td style="text-align: center;">5 hours</td> </tr> <tr> <td>Total number of hours</td> <td style="text-align: center;">65 hours / 30</td> </tr> <tr> <td>Amount of ECTS points per module</td> <td style="text-align: center;">2ETCS</td> </tr> </tbody> </table>	Activity	Student workload	Participation in lectures	10 hours	Participation in practical classes	40 hours	Preparation for practical classes and colloquiums	5 hours	Examination preparation	5 hours	Consultations	5 hours	Total number of hours	65 hours / 30	Amount of ECTS points per module	2ETCS
Activity	Student workload																
Participation in lectures	10 hours																
Participation in practical classes	40 hours																
Preparation for practical classes and colloquiums	5 hours																
Examination preparation	5 hours																
Consultations	5 hours																
Total number of hours	65 hours / 30																
Amount of ECTS points per module	2ETCS																
Didactic cycle 8th semester																	
Subject status <ul style="list-style-type: none"> • mandatory / facultative 	Language of instruction Polish																
Didactic methods Case analysis Didactic discussion Lectures with slides and clinical case presentation Ultrasound imaging Radiography imaging Classes at the patient's bedside Classes in a treatment room Presentation of patient's physical examination Evaluation of radiologic documentation Suggesting a treatment schedule Active participation in classes	Forms and methods of passing and general grading criteria or examination requirements A. Method of passing <ul style="list-style-type: none"> • examination • passing with a grade* <p>* mark where applicable</p> B. Forms of passing: <ul style="list-style-type: none"> • written examination: test / with open questions (exercises)/longer written statement • oral examination • oral assessment/colloquium • completion of a semester assignment: preparation of a design or presentation/conducting research and presenting its results(written/oral)/completion of a specified practical work • agreeing on a passing grade based on partial grades received during the course of the semester* <p>* mark where applicable</p>																

C. Basic grading criteria

Evaluating participation in exercise classes, evaluating preparation for classes, constant observation, partial credit, oral, written, receiving credit for practical classes, oral examination

Definition of preparatory subjects and initial requirements

Required familiarity with:

- the anatomical construction of the human body, including radiologic anatomy
- principles of providing first aid in case of sprains, dislocations, and fractures
- pharmacology
- basis of radiology

Subject aim

Familiarizing the students with methods of examination and the symptoms of the most common diseases and traumas of the locomotor organs as well as the principles of non-surgical and rehabilitation treatment. Becoming familiar with the rules of examining post-trauma patients. Becoming familiar with the examinations used in traumatology of the locomotor organs and developing the ability to interpret results. Becoming familiar with methods of fracture treatment (conservative and surgical)

Curriculum**Lectures**

History of orthopedics, types of diseases and impairments, overview of types of treatment

Diseases and damages of the nerves of the limbs

Bone union and its pathologies

Traumatic shoulder injuries

Methods of osteosynthesis

Dystrophic and compression syndromes

Arm and wrist circumference injuries

Osteoarthritis

Defects and deformations of the locomotor organ

Clinical exercise classes

Orthopedic examinations, evaluation of the limb axis, range of movement in the joints

Hip arthrosis, evaluation of contractures, range of movements, qualification for treatment

Knee arthrosis, evaluation of the knee axis, possibility of treatment preventing the development of arthrosis

Radionegative knee damage

Proximal femur fractures, diagnosis, principles of treatment, complication prevention

Femur shaft and tibia shaft fractures. Principles of treatment, intramedullary osteosynthesis without opening the fracture focus

Articular fracture, of the proximal tibia, malleolar fractures, foot fractures

Shoulder injuries, radionegative, fractures of the proximal femur

Specificity of treating fractures of the shafts of the long bones of the upper limb, including metacarpal bones

Damage to the soft tissues of the hand. Principles of initial and final treatment.

Physiology and mechanics of the spinal cord. Principles of examination

Traumatic spinal cord injuries. Principles of diagnosis, initial and final treatment. Complication prevention

Diseases of the spinal cord, scoliosis, kyphosis, spondylolisthesis

Pelvic injuries. Diagnosis of accompanying injuries. Principles of treatment

Acquired foot and hand deformations

Bone inflammation

Bone and soft tissue cancers

Literature S.Piątkowski „Ortopedia, Traumatologia i Rehabilitacja Narządów Ruchu” W. Dega „Ortopedia i Rehabilitacja” D.Kusz „Kompendium Traumatologii” Magazine „Ortopedia Traumatologia Rehabilitacja”		
Educational effects:		
Effect no	Description of an educational effect	Reference to field of study related effects
Knowledge:		
W1	Understands the causes, symptoms, principles of diagnosis and therapeutic treatment regarding the most common diseases requiring surgical intervention, taking into account the differences of childhood, especially: a) acute and chronic diseases of the abdominal cavity b) disease of the chest c) diseases of the head and limbs d) bone fractures and organ injuries;	F.W01
W2	Knows the principles of qualifying a patient for basic surgical and invasive procedures, diagnosis and treatment procedures, how to perform them and their most common complications	F.W03
W3	Knows the principles of perioperative safety, preparing the patient for surgery, administering general and local anesthesia as well as controlled sedation	F.W04
W4	Knows postoperative treatment with analgesic therapy and postoperative monitoring	F.W05
W5	Knows the principles of the functioning of the State Medical Rescue System	F.W08
W6	Has knowledge regarding the contemporarily used imaging examinations, especially is familiar with: a) radiologic symptomatology of basic diseases b) instrumental methods and imaging techniques used to perform medical procedures c) indications and contraindications and preparing patients for specific imaging examinations and the contradictions to the use of contrast agents	F.W10
Abilities:		
U1	Knows how to treat injuries (put on bandages, or immobilize, treat and stitch a wound	E.U36
U2	Assists with typical surgical procedures, can prepare the operating field and administer local and general anesthesia	F.U01
U3	Can use basic surgical instruments	F.U02
U4	Follows the principles of asepticism and antisepticism	F.U03
U5	Can treat a simple wound, put on and change a sterile surgical bandage	F.U04
U6	Can put on a peripheral venous catheter	F.U05
U7	Can temporarily immobilize a limb, select the type of limb immobilization to use in typical clinical situations and controls the proper limb vascularization after putting on the immobilization bandage	F.U07
U8	Can treat internal bleeding	F.U09
U9	Performs the basic resuscitative procedures with the use of an automated external defibrillator and other rescue activities and provides first aid	F.U10
U10	Acts in accordance with the current algorithm of advanced life support	F.U11

U11	Can monitor the postoperative period based on the basic life parameters	F.U12			
Social competencies:					
K1	Can establish and maintain a deep, full of respect contact with the patient				
K2	Put the good of the patient above everything else				
K3	Protects patient confidentiality and patient rights				
K4	Is aware of his own limitation and the need for constant learning				
Methods used in the verification of educational effects					
Educational effect	Type of grade				
	colloquiums	Solving problems during exercise classes	Solving problems in groups	Oral/practical test	Written test
W1-W6	X			X	X
U1		X		X	X
U2		X		X	X
U3		X		X	X
U4		X		X	X
U5		X		X	X
U6		X		X	X
U7		X		X	X
U8		X		X	X
U9		X		X	X
U10		X		X	X
U11		X		X	X

The practical test checks the student's abilities with the use of a simulator and directly in contact with the patient to:

- evaluate a radiologic examination as far as the most common types of fractures, especially fractures of the long bones
- performing temporary limb immobilization, selecting the type of immobilization to use in typical clinical situations and controlling the proper limb vascularization after putting on the immobilization bandage

Criteria of evaluating educational effects					
Educational effect	For a grade of 3	For a grade of 3.5	For a grade of 4	For a grade of 4.5	For a grade of 5
W1-W6	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U1	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
U2	Exhibits	Exhibits	Exhibits	Exhibits	Exhibits knowledge of

U11	Exhibits knowledge of the educational content on a level of 60%-69%	Exhibits knowledge of the educational content on a level of 70%-76%	Exhibits knowledge of the educational content on a level of 77%-84%	Exhibits knowledge of the educational content on a level of 85%-92%	Exhibits knowledge of the educational content on a level of 93%-100%
------------	---	---	---	---	--