

UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN Faculty of Medicine

Course sylabus - part A Orthopedics with Traumatology

48SJ-OWT ECTS: 3.00 CYCLE: 2024L

SUBJECT MATTER CONTENT

CLASSES

1. Features of the structure of the skeletal and muscular systems. 2. Getting to know the principles of orthopaedic examination. 3. Principles of diagnosis and treatment of injuries of the osteoarticular system. 4. Classification of fractures. 5. Open fractures - Gustilo Anderson scale. 6. The specificity of fracture healing. Basics of Osteosynthesis. Complications of fractures: pseudo-joint and retarded union, necrosis, infections, compartment syndrome. 8. Damage to the upper limb girdle. 9. Fracture of scapula and clavicle, sternoclavicular and clavicle-brachial dislocation, dislocation of the shoulder joint, fracture of the neck and shaft of the humerus. 10. Supracondylar fracture of the humerus. 11. Fracture of the condyles of the humerus. 12. Dislocation of the elbow joint. 13. Dislocation of the head of the radial bone. 14. Fracture of the ulna. 15. Fracture of the shafts of the forearm bones, 16. Fracture and exfoliation of the distal epiphysis of the radius. 17. Fracture of the wrist bones. 18. Fracture of the metacarpal bones and fingers. 19. Open hand injuries, principles of diagnosis and treatment. 20. Upper limb replantations. 21. Damage to the lower limb girdle. 22. Fractures of the pelvis. 23. Traumatic dislocations of the hip joint. 24. Fracture of the neck of the femur. 25. Cross- and subtrochanteric fracture of the femur. 26. Fracture of the shaft of the femur. 27. Supracondylar fracture of the femur. 28. Dislocations and fractures of the patella. 29. Dislocation of the knee joint. 30. Injury of knee ligaments and other radionegative injuries. 31. Intra-articular fractures of the knee. 32. Fractures of the shin bones. 33. Fracture of the ankles of the ankle joint. 34. Traumatic foot injuries. 35. Dislocation of the ankle joint. 36. Damage to nerves and vessels of the upper and lower limbs. 37. Degenerative and degenerative changes in hip and knee joints practical diagnosis and treatment analysis. 38. Characteristics of an orthopaedic examination of a child. 39. Characteristics and differences of fractures in children. Salter-Harris classification. The most common fractures in a child. Methods of treating fractures in children. 40. Principles of installing gypsum fixings. 41. Lateral curvature of the spine in children. Types of scoliosis. Examination of a child with scoliosis. Treatment methods. 42. Developmental dysplasia of the hip joints. Diagnosis, treatment, the role of ultrasound examination, method. Graf. 43. Congenital clubfoot. Clinical picture. Treatment with the Ponseti method. 44. The causes of a child limping. Transient hip arthritis, Perthes disease, juvenile desquamation of the femoral head.

SEMINAR

1. Osteoarthritis 2. Spinal pain syndromes 3. Osteoporosis 4. Enthesopathies and other overload diseases 5. Peripheral nerve neuropathies 6. Sports injuries and typical orthopedic injuries treated in the ER 7. Most common errors in orthopedic diagnostics and therapy. Life-threatening conditions in orthopedics. 8. Neoplasms in orthopedic practice 9. Management of fractures and dislocations 10. Bone and soft tissue inflammation

Legal acts specifying learning outcomes: 672/2020 Disciplines: medical sciences Status of the course:Obligatoryjny Group of courses:B przedmioty kierunkowe Code: ISCED 0912 Field of study: Medicine Scope of education: Profile of education: General academic Form of studies: full-time Level of studies: uniform master's studies Year/semester: 4/7

Types of classes: Lecture, Classes, Seminar Number of hours in semester:Lecture: 10.00, Classes: 30.00, Seminar: 10.00 Language of instruction:English Introductory subject: anatomy, physiology, diagnostic imaging Prerequisites: anatomy, physiology, diagnostic imaging

Name of the organisational unit conducting the course:Katedra Rehabilitacji i Ortopedii Person responsible for the realization of the course:prof. dr hab. n. med. Ireneusz Kowalski, dr hab. n. med. Janusz Płomiński, prof. UWM e-mail: janusz.plominski@uwm.edu.pl rehab@uwm.edu.pl

Additional remarks:

1. Osteoarthritis 2. Emergencies in orthopedics and traumatology 3. Management of dislocations and fractures 4. Joint endoprosthetics 5. Inflammations of bones, joints and soft tissues 6. Enthesopathies and other overload diseases of the musculoskeletal system 7. Osteoporosis and metabolic diseases of bone tissue 8. Complications in orthopedics and traumatology 9. Facts and myths in orthopedics and traumatology

TEACHING OBJECTIVE

Education aims to acquire knowledge and skills in the field of dealing with patients in the area of - immobilization of damage to the musculoskeletal system, transport, wound care - diagnosis of disorders related to the osteoarticular and muscular systems, - proposing appropriate diagnostics and treatment.

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

Symbols for outcomes related to the field of study:

K.3.+, F.U7.+, F.W3.+, F.W1.+, E.U35.+, K.4.+, F.W4.+, K.2.+, F.U8.+, F.W5.+, K.1.+

LEARNING OUTCOMES: Knowledge:

W1 – Knows and understands the causes, symptoms, principles of diagnosing and applying therapeutic procedures in most frequent diseases requiring surgical intervention, the uniqueness of infancy taken into account, in particular: 1) acute and chronic abdominal diseases, 2) chest diseases, 3) limb and head diseases, 4) bone fractures and organ injuries;

W2 – Knows and understands the rules of qualifying for basic surgical operations and invasive diagnostic and treatment procedures, the principles of performing them and their most frequent complications;

W3 – Knows and understands the rules of perioperative safety, patient preparation for the surgery, performance of general and local anaesthesia and controlled sedation;

W4 – Knows and understands post-operative treatment with pain therapy and post-operative monitoring;

Skills:

U1 – Can immobilise a limb temporarily, select the type of immobiliser necessary in typical clinical situations, and control the correct blood flow in the limb once the immobilising dressing has been applied;

U2 – Can assess the results of radiological tests for the most frequent types of fractures, especially long bone fractures;

U3 - Can assessing bedsores and applying the proper dressing.

Social competence:

K1 – He can establish and maintain a deep and respectful contact with the patient, as well as show understanding for worldview and cultural differences.

K2 – He is guided by the good of the patient.

K3 – He takes actions towards the patient based on ethical principles, with the awareness of social conditions and limitations resulting from the disease.

K4 - Adheres to medical confidentiality and patient rights.

TEACHING FORMS AND METHODS:

Lecture(W1;W2;W3;W4;U1;U2;U3;K1;K2;K3;K4;):The method of a traditional lecture, supported by an audiovisual presentation.

Classes(W1;W2;W3;W4;U1;U2;U3;K1;K2;K3;K4;):Exercises take place in the hospital ward, they consist of accompanying the doctor at work, examining patients, analyzing the history of diseases and results, discussing the therapy and its goals.

Seminar(W1;W2;W3;W4;U1;U2;U3;K1;K2;K3;K4;):Active participation of students. Preparation for the topics of classes. Analysis of clinical cases.

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Written exam) - Exam on the content of lectures, seminars and clinical exercises. Form: test questions. Passing threshold 70% The condition for taking the exam is to obtain a positive grade from exercises, seminars and pass the lecture (attendance at the lecture) - Lecture (Part in the discussion) - Presence. -

Classes (Evaluation of the work and cooperation in the group) -Participation in the discussion, patient examination, analyzing medical history and results, discussing therapy and its goals. -

Seminar (Evaluation of the work and cooperation in the group) - Class attendance, involvement and participation in discussions. -

BASIC LITERATURE:

 Dandy J.D., Edwards D.J., Essential Orthopaedics and Trauma: witch student consult, Wyd. Elsevier, R. 2009
 Natarajan M.V., Natarajan"s textbook of Orthopaedics and Traumatology 8th edition, Wyd. Wolters Kluwer, R. 2018
 Dandy J.D., Essential Orthopaedics and Trauma 2, Wyd. Churchill Livingstone, R. 1993
 Gaździk (red)., Testy kliniczne w badaniu kości, stawów i mięśni, Wyd. PZWL, R. 2007

SUPPLEMENTARY LITERATURE:

Detailed description of ECTS credits awarded - part B

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Orthopedics with Traumatology

The number of ECTS credits awarded consists of:

1. Contact hours with the academic teacher:

 participation in: Lecture participation in: Classes participation in: Seminar consultation 	10.0 h 30.0 h 10.0 h 5.0 Total: 55.0 h.
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2. Independent work of a student:

preparation for classes

20.00 h

Total: 20.0 h

contact hours + independent work of a student Total: 75.0 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS credit = 75.0 h : 25.0 h/ECTS = 3.00 ECTS on average: 3.0 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic teacher: 0,00 ECTS points,

- including the number of ECTS credits for hours of independent work of a student: