

Odessa national medical university
Medical faculty №2
Department of Traumatology and Orthopedics

Syllabus of the course

Traumatology and Orthopedics

Volume	3 credits ECTS, 90 hours
Semester, year if study	IX, X semester, course
Days, time, place	According to plan
Teacher (-s)	Teachers of Department of Traumatology and orthopedics
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Work place	Department
Consultations	Thursday 14.30-16.00 Saturday 9.00-10.30

COMMUNICATION

Communication is possible during consultations on a face-to-face basis (offline) or remotely (online) using Teams. Communication can also be carried out using E-mail. In this case, you must indicate your last name, first name, course, faculty and course name. The solution of "business issues" is possible at the phone number.

ANNOTATION OF THE COURSE

Subjects of discipline «Traumatology and orthopedics» are diagnostic methods, treatment and rehabilitation of patients with defeat of a musculoskeletal system.

Prerequisites of course: discipline is a must and is based on studying by students of such fundamental disciplines as anatomy, physiology, radiology, the general surgery (with operational surgery and topographical anatomy) and it is integrated with surgery, children's surgery, oncology, neurosurgery, anesthesiology and an intensive care.

Postrequisites of course: lays the foundation of studying by students of family medicine and medicine of medical emergencies that provides integration of teaching with these disciplines and formations of abilities to apply knowledge of traumatology and orthopedics in the course of further training and in professional activity.

The purpose of "Traumatology and Orthopedics" consists in mastering students diagnostic methods, treatments and rehabilitations of patients with defeat of a musculoskeletal system.

Tasks:

- to acquaint students with diagnostic methods, the principles of prevention, treatment and rehabilitation of patients with lesions of the musculoskeletal system;
- formation of practical skills in diagnostics and treatment of patients with injuries and diseases of the musculoskeletal system;
- formation of skills to provide emergency medical care to victims with fractures at the prehospital stage.
- the formation of skills to draw up treatment and rehabilitation schemes for patients.

Expected results.

As a result of studying the discipline, applicants for higher education should know:

- ♦ basic principles of the organization of the ortopedical-traumatologic help to the population of Ukraine;
- ♦ general elements of care of ortopedical-traumatologic patients;
- ♦ theoretical bases of a modern asepsis and antiseptics;
- ♦ classification, clinic, methods of a temporary and final stop of bleeding;
- ♦ fundamentals of resuscitation, clinical manifestations of terminal states, their diagnostics, stages and actions when performing resuscitation;
- ♦ means and ways of a transport immobilization;
- ♦ diagnostics and treatment of individual pyo-inflammatory diseases of soft tissues, sinews, bones and joints;
- ♦ technique and features of inspection of the ortopedical-traumatologic patient;
- ♦ structure of the medical record of the inpatient.

Higher education applicants must be able to:

- ♦ to diagnose various mechanical damages;
- ♦ to provide first aid at various mechanical damages;
- ♦ to apply a bandage different body parts;
- ♦ to impose and remove a plaster splint;
- ♦ to choose means for a transport immobilization, to impose Kramer, Diterichs's tire;
- ♦ take measures for prevention of developing of decubituses;
- ♦ to carry out differential diagnostics at bleeding, to reveal signs of development of hemorrhagic shock;
- ♦ ways of a temporary stop of bleeding to choose a way for a final stop of bleeding;
- ♦ to choose an adequate way of anesthesia for carrying out this or that intervention;
- ♦ to carry out collecting the anamnesis and objective inspection of the ortopedical-traumatologic patient;
- ♦ to issue the card of the inpatient for the patient with a mechanical trauma or orthopedic pathology.

DESCRIPTION OF THE COURSE

Forms and methods of teaching

The course will be laid out in the form of lectures (10 hours) and practical lessons (40 hours), organization of students' independent work (40 hours).

During the presentation of the discipline, the following teaching methods will be used: verbal (lecture, conversation); visual (multimedia presentations, diagrams, tables, radiographs) practical exercises; method "standardized patient", work with a textbook (independent work of students), the implementation of individual independent tasks. During practical training, the student supervises one patient, writes and submits to the teacher an educational history of the disease. It is planned to conduct group consultations (3 hours per week according to the plan of consultations).

Content of the discipline

Section 1. General questions in traumatology and orthopedics.

Theme 1. Features of inspection of traumatologic and orthopedic patients.

Theme 2. Methods of diagnostic of injuries of bones and joints.

Theme 3. Treatment of orthopedic and trauma patients in outpatient settings.

Theme 4. Traumatic illness. Polytrauma.

Theme 5. Traumatic dislocations.

Theme 6. Resuscitation of patients with traumas of locomotor system.

Theme 7. Stable-functional osteosynthesis.

Theme 8. Complications at treatment of the locomotor systems injuries.

Theme 9. Prosthetics in traumatology and orthopedics.

Theme 10. Endoprosthesis in traumatology and orthopedics.

Theme 11. Modern methods of physiotherapy in traumatology and orthopedics.

Theme 12. Methods of palliative treatment in traumatology and orthopedics, indications and contraindications for surgical treatment in older age.

Section 2. Damages of spine, pelvis, bones and joints of the limbs.

Theme 13. Damages of bones and joints of limbs. Modern methods of treatment.

Theme 14. Methods of transport immobilization at fractures of limbs.

Theme 15. Damages of thorax.

Theme 16. Diagnostic and treatment at injuries of upper limbs bones.

Theme 17. Damages of shoulder girdle.

Theme 18. Diagnostic and tactic of treatment at injuries of elbow joint.

Theme 19. Diagnostic and treatment at injuries of lower limbs bones.

Theme 20. Diagnostic and tactic of treatment at injuries of knee joint.

Theme 21. Diagnostic and tactic of treatment at injuries of ankle joint.

Theme 22. Diagnostic and treatment at injuries of spine and pelvis.

Theme 23. Rehabilitation of patients with effects of the damages of spine and pelvis.

Section 3. Degenerative-dystrophic diseases of joints and deformations of bones.

Theme 24. Degenerative-dystrophic diseases of spine and joints.

Theme 25. Congenital deformations of thorax, spine and limbs.

Theme 26. Inflammatory, tumor and tumor-looking diseases of locomotor system.

Theme 27. Bone-articular tuberculosis.

List of recommended literature

Basic literature:

1. V.F.Venger, V.V.Serdyuk, Rashed Mochammad. Traumatology and orthopedics: Compilation of methodical developments to the practical studies in traumatology and orthopedics including the materials for self-training of students of medical institutes of higher education. – Odessa: Print, 2004. – 288 p.
2. G.G.Golka, O.A.Burianov, V.G.Klimovitskiy. Traumatology and orthopedics: textbook for students of higher medical educational institutions : transl. from. ukr. lang. – Vinnytsia : Nova Knyha, 2018. – 400 p.

EVALUATION

Evaluation of independent work of students (IWS)

Independent work of students, which is included to topic themes, is estimated during current control of mastering topics at relevant auditorium classes. Learning topics, submitted only on independent work, are checked during the differential test.

Evaluation of individual student tasks

In order to increase the arithmetic mean of all grades obtained by the student in the study of the discipline, the grade for individual tasks is accrued to the student only if they are successfully completed and defended. The grade is added to the current performance.

Current progress

Evaluation of the success of the study of each topic in the discipline is performed on a traditional 4-point scale.

The current educational activity of students is controlled on a practical training according to specific goals and during individual work of the teacher with students.

Such methods of monitoring student learning outcomes are used: the oral answer about the topic; testing; solution of situational tasks; defense of medical records, which consist from description of carried out clinical inspections, interpretation and evaluation of their results, justification of the diagnosis, definition of indications for surgery, analysis and assessment of results of instrumental and laboratory researches; control of practical skills of first aid and others.

At the end of the course, the current performance is calculated as the average current score, i.e. the arithmetic mean of all grades obtained by the student on a traditional scale, rounded to the nearest hundredth (for example: 4.76).

Final control of mastering the discipline

The form of the final control of knowledge is a differentiated test, which is carried out in the last lesson. Students who have completed all types of work

stipulated by the curriculum, do not have academic debt and, while studying the discipline, have scored an average number of points for the current educational activity, not less than the minimum – **3.00**, are admitted to the final control.

The form of the differential test is standardized and includes an oral interview of students, which is conducted by the head of the department, professor of the department or teacher of the department at the last lesson of the discipline by interview or acceptance of practical skills. Means of determining the assimilation of the material (one question from three sections) are: assessment of theoretical and practical training of the student on a 4-point (traditional) scale.

Evaluation of discipline

The grade for the discipline consists of the proportion of the results of the assessment of the current educational activity (the arithmetic mean of all the student's current grades) and the differential test, which are, respectively, 50% and 50%.

Incentive points according to the decision of the department can be added to the number of points in the discipline to students who have scientific publications, won prizes for participation in the Olympiad in the discipline among Ukrainian universities and their universities, active students and more.

The average rating for discipline	The discipline rating with a 4-point scale
4,45 – 5,0	5
3,75 – 4,44	4
3,0 – 3,74	3

Evaluation criteria

The grade "*excellent*" is given in the case when the student knows the topics studied in full; gives comprehensive answers without any leading questions; spreads the material without errors and inaccuracies; freely solves situational problems and performs practical tasks of varying complexity.

The grade "*good*" is given when the student knows all the topics and understands them well; answers the questions correctly, consistently and systematically, but they are not exhaustive, although the student answers additional questions without errors; solves situational problems and performs practical tasks, experiencing difficulties only in the most difficult cases.

The grade "*satisfactory*" is given to the student on the basis of his knowledge of the entire volume of the topic on the subject at a satisfactory level of understanding it. The student is able to solve simplified problems with the help of leading questions; solves situational problems and performs practical skills, experiencing difficulties in simple cases; unable to give a systematic answer on his own, but answers simple questions correctly.

The grade "*unsatisfactory*" is given in cases when the student's knowledge and skills do not meet the requirements of "satisfactory" assessment. The student is unable to answer simplified tasks even with leading questions and is unable to solve situational problems.

Independent work of students

Independent and individual work of students provides for the independent study of educational material presented at the IWS, and is carried out in the following forms: study of educational, specialized literature, directive documents, writing a medical history, etc.

COURSE POLICY («game rules»)

Deadline and retake policy

All missed classes must be completed. Practical lessons are worked out according to the plan of consultations.

Applicants for higher education do not have the right to retake the grade of the last lesson (differential test) and current satisfactory and unsatisfactory grades in order to increase the arithmetic mean of all current grades.

Applicants have the right to retake current unsatisfactory grades during the semester only in order to achieve an average current score of 3.00.

Academic Integrity Policy: Cheating is not allowed, student must be fluent in material.

Policy on attendance and lateness: the student should not miss lectures and practical classes, the teacher should be informed about absence for valid reasons in advance, late arrivals are undesirable.

Mobile devices: it is unacceptable to use a mobile phone, tablet or other mobile devices during the lesson (except as provided by the curriculum and methodological recommendations of the teacher).

Audience behavior: creative, business-like, friendly atmosphere.