

**MINISTRY OF HEALTH OF UKRAINE  
ODESSA NATIONAL MEDICAL UNIVERSITY**

**Medical international faculty**

**Department of Traumatology, Orthopedics and Battlefield surgery**

**Syllabus of the course  
TRAUMATOLOGY AND ORTHOPEDICS**

<b>Amount of discipline</b>	Total amount of hours on discipline: 90 hours, 3 credits Semesters: IX - X semesters Year if study: 5 <sup>th</sup> course
<b>Days, time, place of mastering of discipline</b>	According to plan Department of Traumatology, Orthopedics and Battlefield surgery Odessa, Pastera str. 9-V, “University clinic”, 1 <sup>st</sup> and 2 <sup>nd</sup> floor Tenista str. 8, “University clinic”, 2 <sup>nd</sup> floor Vorobyova str. 5, Hospital N11, 1 <sup>st</sup> and 2 <sup>nd</sup> floor
<b>Teacher (-s)</b>	Head of Department, Dr.med., professor Sukhin Yurii Vitaliyovich Vice-head of Department, Dr.med., professor Bodnya Alexandr Ivanovich Professor of Department, Dr.med., professor Saed Mochsen Ahmed Docent of Department, Ph.D., docent Chuyko Yurii Nikolaevich Docent of Department, Ph.D., docent Topor Vladimir Petrovich Docent of Department, Ph.D., docent Pavlichko Yurii Yuriyovich Docent of Department, Ph.D., docent Gai Leonid Anatoliyovich Docent of Department, Ph.D., Logai Viacheslav Arturovich Assistant, Chabanenko Diomid Sergeevich
<b>Contacts</b>	Bodnya Alexandr Ivanovich, vice-head 050-530-60-90 Logai Viacheslav Arturovich, responsible for organizational and educational work of the department 050-395-03-62 Dovgal Viacheslav Valeriyovich, laboratory assistant 050-533-51-00 E-mail: trauma@onmedu.edu.ua Offline consultations: 14.30-16.00 each Thursday, 9.00-10.30 each Saturday Online consultations: 16.00-18.00 each Thursday, 9.00-14.00 each Saturday. Consultation link – consultations are given for each group during practical classes.

**COMMUNICATION**

Communication with students will be provided offline.

During online classes communication will be provided online using Teams, also using E-mail, messenger Viber (creating individual chats for each group with help of head of group).

**ANNOTATION OF THE COURSE**

*Subjects of discipline* – specialties of injury diagnostics, methods of treatment and rehabilitation of patients with defeat of a musculoskeletal system.

*Prerequisites and post-requisites of the discipline (place of the discipline in the educational program):*

*Prerequisites of the discipline:* the discipline is based on the students' study of such fundamental disciplines as human anatomy, physiology, radiology, general surgery (with operative surgery and topographic anatomy) and integrates with surgery, pediatric surgery, oncology, neurosurgery, anesthesiology and intensive care.

*Post-requisites of the discipline:* lays the foundations for students to study family medicine and emergency medicine, which involves the integration of teaching with these disciplines and the formation of skills to apply knowledge of traumatology and orthopedics in the process of further education or professional activity.

*The purpose of the discipline:* acquiring additional knowledge and mastering professional competences and methods of diagnosis, treatment and rehabilitation of patients with damage to the musculoskeletal system, communication skills, taking into account the peculiarities of communication between a family doctor and an injured person.

*Tasks of the discipline:*

1. To acquaint applicants with methods of diagnosis, principles of prevention, treatment and rehabilitation of patients with damage to the musculoskeletal system;
2. Formation of practical skills of diagnosis and treatment of patients with injuries and diseases of the resistance and movement system;
3. Formation of skills to provide emergency medical care to victims with fractures at the pre-hospital stage.
4. Formation of the ability to draw up treatment and rehabilitation schemes for patients.

*Expected results:*

As a result of studying the discipline, the student of higher education must:

*Should:*

- ♦ 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.

*Be able:*

- 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;
- to take measures for prevention of developing of bedsores;

- 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 (6 hours) and practical lessons (44 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.

### *Content of the discipline*

*Section 1.* General questions in traumatology and orthopedics.

Theme 1. Features of inspection of trauma 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. Endoprosthetics in traumatology and orthopedics

Theme 11. Methods of physiotherapy in traumatology and orthopedics

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

Theme 12. Damages of bones and joints of limbs. Modern methods of treatment

Theme 13. Methods of transport immobilization at fractures of limbs

Theme 14. Damages of thorax

Theme 15. Damages of shoulder girdle

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

Theme 17. Diagnostic and treatment at injuries of lower limbs bones

Theme 18. Diagnostic and treatment at injuries of spine and pelvis

Theme 19. Rehabilitation of patients with effects of the damages of spine and pelvis

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

Theme 20. Bone-articular tuberculosis

Theme 21. Degenerative-dystrophic diseases and its treatment

Theme 22. Degenerative-dystrophic diseases of spine

Theme 23. Degenerative-dystrophic diseases of joints

Theme 24. Congenital deformities of the spine and thorax

Theme 24. Congenital and acquired deformities of limbs.

### *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.

#### *Electronic resources*

1. <http://www.moz.gov.ua/ua/portal> – official web-site MOF of Ukraine;
2. <http://inmeds.com.ua> – web-site «The one medical space»;
3. <http://www.nbuv.gov.ua> – National library of Ukraine .

## **EVALUATION**

Current control: oral answer (control of theoretical knowledge); evaluation of performance of practical skills, evaluation of solving situational clinical tasks; evaluation of clinical examinations, interpretation of their results; evaluation of the correctness of the justification of the diagnosis and the choice of the treatment method; analysis and evaluation of instrumental research results.

### **Criteria for current control in the practical lesson**

<b>Grade</b>	<b>Criteria of evaluation</b>
«5»	The student is fluent in the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the subject of the lesson, and demonstrates clinical thinking.
«4»	The student has a good knowledges of the material, participates in the discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with some errors, which he independently corrects, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
«3»	The student does not have sufficient knowledge of the material, is unsure of participating in the discussion and solution of the situational clinical problem, and demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with significant errors.
«2»	The student does not possess the material, takes a passive part in the discussion and solution of the situational clinical problem, and does not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data.

*Forms and methods of final control:* differentiated control, which involves an interview with the student about the theoretical material, solving situational tasks and a description of results of instrumental research methods.

The student is admitted to the differentiated control on the condition that the requirements of the educational program are met and if he received at least **3.00** points for the current educational activity.

*Possibility and conditions of obtaining additional (bonus) points:* not provided.

## INDEPENDENT WORK OF STUDENTS

Presupposes independent work with recommended sources of basic and additional literature, independent mastering of preparation material for each of the practical classes.

### COURSE POLICY

#### *Deadline and rework policy*

- Missed classes due to improper reasons must be made up according to the schedule of the teacher on duty.
- Absences due to valid reasons are processed with the permission of the dean's office according to an individual schedule.
- Applicants of higher education do not have the right to redo the grade of the last class (differentiated assessment) and current satisfactory and unsatisfactory grades in order to increase the arithmetic average of all current grades.
- Applicants for higher education have the right during the semester to retake current unsatisfactory grades only in order to achieve a current grade point average of 3.00.

#### *Academic Integrity Policy:*

Applicants must observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline.

Unacceptable in educational activities for participants of the educational process are:

- using family or official ties to obtain a positive or higher grade during any form of control of learning outcomes;
- use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
- passing procedures for control of training results by fake persons.

For violation of academic integrity, students may be held to the following academic responsibility:

- a decrease in the results of the evaluation of the work in the practical session, differential examination, etc.;
- repeated evaluation (repeated survey);
- appointment of additional control measures (additional situational tasks, tests, etc.).

#### *Policy on attendance and lateness:*

Dress-code: a medical gown that completely covers the outer clothing, or medical pajamas, a cap, a mask, and a change of shoes;

Equipment: notebook, pen;

State of health: students suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend classes;

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.

Lateness to classes is not acceptable, but if the student is late, he can attend it, however, the teacher puts "nb" in the journal, and the student must work it out in the general order.

*Using mobile devices:*

It is unacceptable to use a mobile phone, tablet or other mobile devices during the lesson.

Mobile devices can be used by applicants with the permission of the teacher in cases provided for by the curriculum and methodical recommendations.

*Audience behavior:*

The behavior of students and teachers in the classrooms must be working and calm, comply with the rules established by the Regulation on academic integrity and ethics of academic relations at the Odessa National Medical University, in accordance with the Code of Academic Ethics and University Community Relations of the Odessa National Medical University.