Odessa national medical university International faculty Department of Traumatology and Orthopedics

Syllabus of the course

EXAMINATION METHODS OF PATIENTS WITH INJURIES OF THE MUSCLE-MUSCLE SYSTEM

Volume	4 credits / 120 hours
Semester, year	I st Semester, 1 year of study
of study	
Days, time,	According to the plan in classes of Department of Traumatology
place	and orthopedics, Hospital N11, Vorobyova street 5.
Teacher (-s)	Sukhin Yurii, Dr. med., professor,
	Head of Department
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Work place	Classroom №11 Department of traumatology, 2 floor. Hospital
_	N11, Vorobyova street 5.
Consultations	Offline consultations: Thursday 14.00-16.00; Saturday 9.00-
	10.30
	Online consultations: Thursday 14.00-16.00; Saturday 9.00-
	10.30
	Microsoft Teams or Viber

COMMUNICATION

Communication with graduate students is carried out through face-to-face meetings. In case of changing to online study, communication with graduate students will be carried out using e-mail and programs: Microsoft Teams and Viber.

ANNOTATION OF THE COURSE

Subjects of discipline

Subject of discipline «Examination methods of patients with injuries of the muscle-muscle system» is mastering modern methods of clinical and instrumental diagnosis of injuries and diseases of the musculoskeletal system.

Prerequisites and Postrequisites of course (Position of discipline in education program)

The study of the academic discipline «Examination methods of patients with injuries of the muscle-muscle system» is based on the study by a graduate student/student of such fundamental disciplines as human anatomy, physiology, radiology, general surgery (with operative surgery and topographic anatomy) and is integrated with surgery, pediatric surgery, oncology, neurosurgery, anesthesiology and intensive therapy.

The purpose of course. The purpose of the educational discipline "Examination methods of patients with injuries of the muscle-muscle system" is to train a highly qualified specialist by forming in-depth knowledge of theory and practice in orthopedics and traumatology, acquiring practical skills in diagnosing injuries and diseases of the musculoskeletal system.

Tasks of discipline:

- providing PhD candidates with knowledges about the types of diagnostic methods in traumatology and orthopedics;
- providing PhD candidates with basic knowledges about the algorithm of clinical examination of joints, bones, muscles and ligaments in injuries and diseases of the musculoskeletal system;
- providing PhD candidates with knowledges about the analysis and interpretation of the results of instrumental research methods for injuries and diseases of the musculoskeletal system.

Expected results

According to the results of studying the discipline, graduate students should *know:*

- basic principles of the organization of the ortopedical-traumatologic help to the population of Ukraine;
 - theoretical bases of a modern asepsis and antiseptics;
 - classification, clinic, methods of a temporary and final stop of bleeding;
- clinic, diagnosis and treatment of mechanical damage to soft tissues, tendons, 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 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 carry out collecting the anamnesis and objective inspection of the ortopedical-traumatologic patient.

DESCRIPTION OF THE COURSE

Forms and methods of study

The course will be laid out in the form of seminar classes (60 hours), and also – trough organization of independent work (60 hours); in total – 120 hours (4 credits).

The study of the discipline is implemented on the basis of such teaching methods:

- an oral survey on the topic of the class;
- solving situational problems;
- defense of the medical history, which consists of a description of clinical examinations, interpretation and evaluation of their results, substantiation of the

diagnosis, determination of indications for surgical interventions, analysis and evaluation of the results of instrumental and laboratory tests.

Content of the discipline

- Topic 1. General and local examination of limbs and joints. Palpation, range of motion in the joints.
- Topic 2. Clinical measurements, research of muscle strength, limb functions. Clinical and X-ray studies.
- Topic 3. Examination of the shoulder girdle and shoulder joint. Deformations of the shoulder joint and humerus.
 - Topic 4. Clinical and X-ray examination of the shoulder girdle.
- Topic 5. Examination of the elbow joint. Pathological changes in injuries of the elbow joint.
 - Topic 6. Clinical manifestations of a pathologically changed elbow joint.
 - Topic 7. Examination of the carpal joint. Changes in deformities and diseases.
 - Topic 8. Examination of the normal and damaged hip joint.
- Topic 9. Clinical and X-ray examination of the hip joint in case of injuries and diseases.
- Topic 10. Examination of the knee joint. Clinical signs of pathological changes in the joint.
 - Topic 11. Examination of the supracalcaneal joint. Examination of the foot.
 - Topic 12. Clinical and X-ray examination of the supracalcaneal joint and foot.
 - Topic 13. Examination of the spine. Pathological forms of the spine.
 - Topic 14. Posture disorders. Chronic back pain.
 - Topic 15. Pelvic examination.

Recommended literature:

basic:

- 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 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; solution of situational tasks; 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).

Evaluation of current control:

Meaning of grade **«excellent»**: a graduate student shows special creative abilities, knows how to independently acquire knowledge, finds and processes the necessary information without the help of a teacher, knows how to use the acquired knowledge and skills to solve problems, is able to produce innovative ways of solving problems, convincingly argues answers, independently reveals his own gifts and inclinations.

Meaning of grade **«good»**: a graduate student is fluent in the studied amount of material, applies it in practice, freely solves exercises and problems in standard situations, independently corrects the mistakes made, the number of which is insignificant.

Meaning of grade **«satisfactory**»: a graduate student is able to master a significant part of the theoretical material, but mainly in a reproductive form, demonstrates knowledge and understanding of the main provisions, can analyze the educational material with the help of the teacher, correct errors, among which there are a significant number of significant ones.

Meaning of grade **«unsatisfactory»**: a graduate student knows the material at the level of individual fragments, which constitute a small part of the educational material.

Final control. The study of the academic discipline ends with a test. Graduate students who have not missed practical classes or completed missed classes and have an average score of at least *3.00* will pass the test.

Independent work of students

The independent work of a graduate student, which is included in the topics of practical classes, is evaluated during the current monitoring of mastering the topics of the sections in the corresponding classroom session. Mastery of topics that are presented only for independent work is checked during the exam.

COURSE POLICY («game rules»)

Deadline and retake policy

Tasks must be completed on time according to the deadline. A graduate student receives an unsatisfactory grade for untimely completion of the assignment. If the student of higher education was absent from classes for any reason, then the rework is carried out within the deadlines set by the teacher in accordance with the "Regulations on the Organization of the Educational Process at ONMedU" (link to the regulations on the university's website: https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnij-proces.pdf). Reassembly is carried out in accordance with the approved schedule.

Academic Integrity Policy

The policy of the educational component is based on the principles of academic integrity (link to the regulations on the university website https://onmedu.edu.ua/wpcontent/uploads/2020/07/polozhennja-pro-dobrochesnist.pdf) and is determined by the system of requirements that the teacher presents to the applicant during studying the educational component:

- independent performance of educational tasks, tasks of current and final control of study results (for persons with special educational needs, this requirement is applied taking into account their individual needs and capabilities);
- references to sources of information in the case of using ideas, developments, statements, information.

Attendance and Tardy Policy

Attendance and work in classroom classes (lectures and seminar classes) is mandatory for obtaining a satisfactory grade. A graduate student is allowed to be late for no more than 10 minutes.

Mobile devices

It is permissible to use mobile devices during the lesson with the teacher's permission.

Behavior in the classroom

While in the audience, the following values should be cultivated: respect for colleagues; tolerance for others; receptivity and impartiality; argumentation of agreement or disagreement with the opinion of other participants in the discussion, as well as one's own opinion; respecting the dignity of the opponent's personality during communication; compliance with the ethics of academic relationships.