KHARKIV NATIONAL MEDICAL UNIVERSITY

Educational and Scientific Institute for the Training of Foreign Citizens of KhNMU

VII faculty for training foreign students

Department of Traumatology and Orthopedics

Branch of knowledge:   22 Health

Specialty:   222 Medicine

Educational and vocational prog frame second (master's) level of higher education training professionals 22 professionals 22 "Health" 222 specialty "Medicine"

SYLLABUS OF THE COURSE

" **Traumatology and orthopaedics**"

(for 5th year students)

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| The syllabus of the discipline was approved at the meeting of the Department of Traumatology and Orthopedics    Protocol from  August 27 , 2020 № 12    Head of Department  \_\_\_\_\_\_  Professor G.G. Golka    August 27 2020 |  | Approved by the methodical commission of KhNMU on problems of surgical profile      Protocol from  August 28, 2020 № 1    Head  \_\_\_\_\_\_\_\_\_\_\_\_     Professor V.O. Siplivyj    August 28 2020 |

Kharkiv - 2020

**COURSE "TRAUMATOLOGY AND ORTHOPEDICS"**

Developers syllabus :

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FAQ: planed and on-line consultation carried the lecturer After the practical classes scheduled.

Location - 3a Balakireva Lane, KNP "City Clinical Hospital of Ambulance and Emergency Care. prof. O.I Meshchaninov” of Kharkiv City Council, 5th floor, Department of Traumatology and Orthopedics.

**Information about the discipline "Traumatology and Orthopedics"**

1. **Description of the discipline**

Course - 5

9 or 10 semester / 2020-2021 academic year

Scope of the discipline: 3 ECTS credits, 10 hours of lectures , 40 hours of practical classes , 40 hours of VTS

General characteristics of the discipline

Traumatology and orthopedics is an independent clinical discipline that deals with the development of measures for the prevention of injuries, treatment of victims and patients with mechanical injuries and diseases of the musculoskeletal system, as well as their consequences in peacetime and wartime.

Traumatology and orthopedics provides specialized orthopedic and trauma care for victims of musculoskeletal injuries, treats the sick and wounded with complications of injuries, and develops a system of preventive measures to prevent injuries among the population, development and implementation in clinical practice of promising technologies for reconstruction. operations.

The role and place of the discipline in the system of training Traumatology and orthopedics as a discipline lays the formation of skills to apply knowledge in further learning and professional activities, lays the foundations of a healthy lifestyle and prevention of dysfunction of the support system and movement in life.

The subject of the discipline is the formation of practical skills in the diagnosis and treatment of patients with injuries of the musculoskeletal system, the organization of trauma care for patients with musculoskeletal injuries in the prehospital and hospital stages, general issues of gunshot wounds.

Discipline page in the Moodle system - [http: //31.128.79.157: 8083 / course / index.php? Categoryid = 28](https://translate.google.com/translate?hl=uk&prev=_t&sl=uk&tl=en&u=http://31.128.79.157:8083/course/index.php%3Fcategoryid%3D28)

1. **The purpose and objectives of the discipline.**

2 .1. The purpose of teaching the discipline "Traumatology and Orthopedics" is to acquaint students with the general provisions of traumatology and orthopedics, with the means and methods of injury prevention, first aid, treatment and rehabilitation of patients with injuries and diseases of the musculoskeletal system. The purpose of practical classes should be the formation of practical skills of diagnosis and treatment of patients with injuries and diseases of the musculoskeletal system.

The ultimate goal of teaching term course "Traumatology and Orthopedics" in higher education stems from the purpose of education and training graduates of medical school and determined the content of theoretical knowledge, methodological training, practical skills, which should possess specialist.

2 .2. The main objectives of the discipline are the acquisition by students of knowledge that would help prevent injuries, strengthen and maintain health; thoroughly master the knowledge of the mechanisms of injuries of the musculoskeletal system and methods of treatment at the pre-hospital and hospital stages.

2 .3. Competences and learning outcomes, the formation of which is facilitated by the discipline (relationship with the normative content of training of higher education, formulated in terms of learning outcomes in the Standard).

According to the requirements of the standard, the discipline provides students with the acquisition of general and professional *competencies:*

Integral competence:

Ability to solve complex specialized problems and practical problems associated with injuries and diseases of the musculoskeletal system ; integrate knowledge and solve complex issues, formulate judgments on insufficient or limited information; clearly and unambiguously communicate their conclusions and knowledge, reasonably substantiating them, to the professional audience.

General competencies:

From the ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly trained; ability to apply knowledge in practical situations; knowledge and understanding of the subject area and understanding of professional activity; ability to adapt and act in a new situation; ability to make an informed decision; work in a team; interpersonal skills; ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language; skills of using information and communication technologies; certainty and persistence in terms of tasks and responsibilities; ability to act socially responsibly and consciously.

Professional competencies in the field of traumatology and orthopaedics:

Survey skills; ability to determine the necessary list of laboratory and instrumental studies and evaluate their results; ability to establish a preliminary and clinical diagnosis of the disease; ability to determine the necessary tactics and methods of surgical operations in a modern format; maintenance of the postoperative period; rehabilitation regime; ability to diagnose emergencies; ability to determine tactics and skills of emergency medical care; skills of performing medical manipulations; ability to plan and carry out preventive measures, including for diseases of the musculoskeletal system ; ability to keep medical records.

The study of this discipline forms students' *social skills:*

* communicativeness (realized through: the method of group work and brainstorming during the analysis of clinical cases, the method of presenting the results of independent work and their protection in the group),
* teamwork (implemented through: group work method and brainstorming during the analysis of clinical cases),
* conflict management (implemented through: business games),
* time management (implemented through: the method of self-organization during classroom work in groups and independent work),
* leadership skills (implemented through: the method of presenting the results of independent work and their defense in the group).

1. Discipline status: the format of the discipline is mixed - a discipline that has support in the Moodle system, teaching the discipline, involves a combination of traditional forms of classroom learning. And in case of emergencies - distance learning, which uses available interactive information technology (ZOOM, Moodle), face-to-face and distance counseling.
2. Teaching methods for practical classes are used face-to-face and distance forms of learning with the use of presentations, methodological developments of the department, tests, textbooks in available information interactive technologies (ZOOM, Moodle).

Teaching the discipline "Traumatology and Orthopedics" is based on the introduction of modern teaching methods: problem, multimedia, binary lecture, lecture-conversation; discussion, "round table", didactic games, case method, modeling of professional, problem situations.

1. **Recommended Books**

The department has a complete list of guidelines, a textbook on this discipline in Russian, Ukrainian and English.

1. Chapman MW (Ed): Operative Orthopedics, 2nd edn. Philadelphia: J.B. Upplncott Company, 1988.
2. Cocchi, MN; Kimlin, E; Walsh, M; Donnino, MW (August 2007). "Identification and resuscitation of the trauma patient in shock". Emergency medicine clinics of North America 25 (3): 623–42
3. Fehlings M.G. Louw D. Initial stabilization and medical management of acute injury. Am. Fam. Physician. 1996; –162
4. Frost HM: The biology of fracture healing. An overview for clinicians. Part I. Clinical Orthopedics and Related Research. Nov: 1989 (248): 283-293.
5. Frost HM: The biology of fracture healing. An overview for clinicians. Part II. Clinical Orthopedics and Related Research, Nov: 1989 (248): 294-309.
6. Gowned and gloved orthopedics: introduction to common procedures / edited by Nail P. Sheth, Jess H. Lonner. – 1st ed. p.; cm. 2009 Philadelphia, Saunders
7. Gustilo RB. Kyle RF, Templeman D: Fracture and Dislocations, St. Louis: Mosby-Year Book. Inc., 1992.
8. Krettek, C. (1997). "Foreword: Concepts of minimally invasive plate osteosynthesis". Injury. 28 Supple 1: A1–A2
9. Maheshwari J. Essential Orthopedics. 2nd Revised and Enlarged Edition Interprint New Delhi, 1997. 325 p
10. McRae, Ronald; Esser, Max (2008). Practical Fracture Treatment (5th ed.). Elsevier Health Sciences. p. 187.
11. Rockwood CA (Jr.), Green David P (Ed.): Fractures, 2nd edn. Philadelphia: J.B. Lippincott Company, 1984.
12. S.T. Marshall; B.D. Browner (2012) [1st. Pub. 1956]. "Chapter 20: Emergency care of musculoskeletal injuries". In Courtney M. Townsend Jr. Sabiston textbook of surgery: the biological basis of modern surgical practice. Elsevier. pp. 480–520.
13. Stewart JDM & Hallett JP: Traction and Orthopedic Appli­ances. Edinburgh: Churchill Livlngstone, 1983.
14. Traumatology and orthopedics. Підручник для студентів вищих медичних навчальних закладів (англійською мовою) / за ред. Голки Г.Г., Бур’янова О.А., Климовицького В.Г.-Вінниця: Нова Книга, 2018. – 400 с.
15. Treatment in Traumatology: methodical instructions for self-study of 5 coursestudents of medical faculties / comp. H. H. Holka, O. G. Fadeyev et al. – Kharkiv : KhNMU, 2019. – 28 p.
16. Wilson JN {Ed.]: Watson-Jone's Fractures and Joint Injuries, 6th edn. Edinburgh: Churchill Livingstone, 1982.

1. *Prerequisites.*The study of the discipline involves the prior mastering of disciplines in medical and biological physics, biological and bioorganic chemistry, human anatomy, human physiology, basics of medical knowledge, radiology, general surgery (with operative surgery and topographic anatomy), physiotherapy, methods of physical rehabilitation. Especially the principles of evidence-based medicine, emergency and urgent medical care, as well as to have practical skills in caring for patients with a surgical profile and their management in outpatient and inpatient settings. The discipline "Traumatology and Orthopedics" is integrated with surgery, pediatric surgery, oncology, neurosurgery, neurology, anesthesiology and intensive care, military field surgery**.**

*Postrequisites*. The main provisions of the discipline should be applied in the study of related disciplines during the 5th year of study, is the basis for preparation for a differentiated test.

1. **Learning outcomes, including practical skills (list of knowledge, skills and abilities acquired by the applicant in the process of studying it)**

The course covers the main aspects of training a future doctor in the field of "Traumatology and Orthopedics".

According to the training program in the discipline "Traumatology and Orthopedics", the student (higher education level) will acquire theoretical knowledge, methodological training, practical skills and abilities.

As a result of mastering the discipline, the applicant must demonstrate the following learning outcomes:

1. Know and apply procedures and measures to ensure the quality of education and criteria for evaluating educational activities.

2. Implement a set of management functions (planning, forecasting, organization, motivation, implementation, control and correction) of educational activities.

3. Understand the place of the discipline in the system of specialist training and its relationship with other fields of knowledge and disciplines.

The student has the required practical skills:

- provides emergency medical care for injuries of the musculoskeletal system, traumatic shock and injuries of blood vessels and nerves;

- conducts interviews and examinations of patients, determines the clinical symptoms that are characteristic of the typical picture of damage or disease of the musculoskeletal system and establishes the diagnosis;

- determines the scheme of conservative and surgical treatment of a patient with trauma or disease of the musculoskeletal system;

- has the basic principles of treatment of injuries and diseases of the musculoskeletal system;

- determines the principles of postoperative administration and rehabilitation of the patient.

**The content of the discipline**

Curriculum of the discipline

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Names of sections of the discipline and topics | Number of hours | | | | | |
| Full-time form of study | | | | | |
| total | Including | | | | |
| lect | pr | lab | ind | I S |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Discipline section 1. **General issues of traumatology and orthopedics** | | | | | | |
| Topic 1. Introduction to the specialty. Bone regeneration. Features of examination of traumatological and orthopedic patients. Modern methods of diagnosis and treatment of fractures. Classification of bone fractures.  - Basic information about injuries. Types of injuries. Occupational diseases of the apparatus of support and movement. | 7        5 | 2 | 5 |  |  | 5 |
| **Together under section 1** | 12 | 2 | 5 |  |  | 5 |
| Discipline section 2. **Damage to the spine, pelvis, bones and joints of the upper and lower extremities.** | | | | | | |
| Topic 1. Damage to the shoulder girdle. Traumatic dislocations. Injuries and damage to blood vessels and nerves.  - Inflammatory diseases of bones and joints | 7    5 | 2 | 5 |  |  | 5 |
| Topic 2. Fractures of the upper extremity. Traumatic illness. Traumatic shock.  - Transport immobilization | 7    5 | 2 | 5 |  |  | 5 |
| Topic 3. Fractures of the spine and pelvis. Prolonged crushing syndrome, etiology, pathogenesis. Gunshot wounds of joints and bones, their classification.  - Hematogenous osteomyelitis. | 7      5 | 2 | 5 |  |  | 5 |
| Topic 4. Fractures of the lower extremity. Methods of conservative treatment in traumatology and orthopedics, indications and contraindications to surgical treatment.  - Rehabilitation physiomechanotherapy and therapeutic gymnastics | 5      5 | - | 5 |  |  | 5 |
| **Together under section 2** | 46 | 6 | 20 |  |  | 20 |
| Discipline 3. **Degenerative-dystrophic diseases of the joints and spine. Pediatric orthopedics** | | | | | | |
| Topic 1. Congenital deformities of the spine (scoliotic disease), muscular crooked neck. Curation of patients.  - Osteochondropathy.  - Bone oncology | 5    5  5 | - | 5 |  |  | 5  5 |
| Topic 2. Congenital bone deformities, congenital hip dislocation, clubfoot. | 5 | - | 5 |  |  |  |
| Topic 3. Osteochondrosis of the spine, osteoarthritis. Clinic, diagnosis, treatment. Protection of educational history of the disease. Differentiated credit.  - Infectious and toxic diseases of the spine. | 7    5 | 2 | 5 |  |  | 5 |
| **Together under section 3** | 32 | 2 | 15 |  |  | 15 |
| Total hours of discipline | 90 | 10 | 40 |  |  | 40 |

**Lecture topics**

|  |  |  |
| --- | --- | --- |
| №  s / n | Name topics | Number  hours |
| 1 | Introduction to traumatology and orthopedics. Closed and open fractures. Modern methods of fracture treatment. Indications and contraindications to surgical treatment. | 2 |
| 2 | History of traumatology and orthopedics. Bone regeneration. Transport immobilization. Traumatic illness. Clinic, diagnosis, treatment. Traumatic shock. | 2 |
| 3 | Open non-gunshot and gunshot fractures, features of treatment. Traumatic osteomyelitis. Injuries and damage to blood vessels and nerves. | 2 |
| 4 | Spinal cord and pelvic injuries. Clinic, diagnosis, treatment. Prolonged crushing syndrome. | 2 |
| 5 | Osteochondrosis of the spine, osteoarthritis. Clinic, diagnosis, treatment. | 2 |
| Total lecture hours | | 10 |

**Topics of practical classes**

|  |  |  |
| --- | --- | --- |
| №  s / n | Name topics | Number  hours |
| 1 | - Introduction to the specialty. Bone regeneration. Features of examination of traumatological and orthopedic patients. Modern methods of diagnosis and treatment of fractures. Classification of bone fractures.  - Conducting briefings on "Anti-epidemic measures in educational institutions for the period of quarantine in connection with the spread of coronavirus disease" and clarification of individual prevention measures. | 5 |
| 2 | Damage to the shoulder girdle. Traumatic dislocations. Injuries and damage to blood vessels and nerves. | 5 |
| 3 | Fractures of the upper limb. Traumatic illness. Traumatic shock. | 5 |
| 4 | Fractures of the spine and pelvis. Prolonged crushing syndrome, etiology, pathogenesis. Gunshot wounds of joints and bones, their classification. | 5 |
| 5 | Fractures of the lower extremity. Methods of conservative treatment in traumatology and orthopedics, indications and contraindications to surgical treatment. | 5 |
| 6 | Congenital deformities of the spine (scoliotic disease), muscular crooked neck. Curation of patients. | 5 |
| 7 | Congenital bone deformities, congenital hip dislocation, clubfoot. | 5 |
| 8 | Osteochondrosis of the spine, osteoarthritis. Clinic, diagnosis, treatment. Protection of educational history of the disease. Differentiated credit. | 5 |
| Total hours of practical training | | 40 |

**Individual work**

|  |  |  |
| --- | --- | --- |
| №  s / n | Name topics | Number  hours |
| 1 | Basic information about injuries. Types of injuries. Occupational diseases of the apparatus of support and movement. | 5 |
| 2 | Osteochondropathy. | 5 |
| 3 | Transport immobilization | 5 |
| 4 | Hematogenous osteomyelitis. | 5 |
| 5 | Rehabilitation physiomechanotherapy and therapeutic gymnastics | 5 |
| 6 | Infectious and toxic diseases of the spine. | 5 |
| 7 | Inflammatory diseases of bones and joints | 5 |
| 8 | Bone oncology | 5 |
| Total hours of independent student work | | 40 |

**Section 1**. General issues of traumatology and orthopedics

Topic 1 . Introduction to the specialty. Bone regeneration. Features of examination of traumatological and orthopedic patients. Modern methods of diagnosis and treatment of fractures. Classification of bone fractures.

History of development and modern achievements of domestic traumatology and orthopedics. Bone regeneration, stages and phases. Features of history taking in patients with pathology of the musculoskeletal system. Methods of determining the axis of the extremities. The main types of deformations and contractions of the extremities. Types reduction limbs and how they determined . Methods for determining the volume of movement in the joints. Absolute and relative clinical signs of fractures, dislocations. Reliable and relative signs of joint disease and spine. Classification of fractures, clinic, diagnosis, treatment. Complications that occur in the treatment of fractures, their prevention and treatment.

**Section 2**. Damage to the spine, pelvis, bones and joints of the upper and lower extremities.

Topic 1.   Damage to the shoulder girdle. Traumatic dislocations. Injuries and damage to blood vessels and nerves.

Classification, clinic, diagnosis and treatment of clavicle and scapular fractures.

General classification of dislocations. Mechanogenesis, classification, clinic and treatment at the prehospital and hospital stages. Classification of bleeding in injuries and damage to blood vessels. Clinic of acute blood loss. Ways to temporarily stop bleeding. Clinic and treatment of nerve damage.

Topic 2.   Fractures of the upper extremity. Traumatic illness. Traumatic shock.

Damage to the shoulder girdle. Fractures of the upper limb. Clinic, diagnosis, treatment.

Classification, clinic, diagnosis and treatment of clavicle and scapular fractures. Mechanogenesis of humeral fractures. Classification, diagnosis, treatment. Fractures of the forearm bones. Classification, mechanism of damage, clinic, diagnosis, treatment. Fractures of the bones of the hand. Typical mechanisms of injury. Clinic, diagnosis, treatment.

Prevention of injuries of the shoulder girdle and bones of the upper extremity. Rehabilitation measures for these injuries. Pathogenesis of traumatic disease, periods of its course. Diagnosis and treatment of traumatic illness. Pathogenesis, classification and treatment of traumatic shock. Emergency care for victims of traumatic shock. Features of treatment of multiple, combined and combined injuries of the support and movement system. Transport immobilization. Basic principles. Devices for transport immobilization.

Topic 3. Fractures of the spine and pelvis. Prolonged crushing syndrome, etiology, pathogenesis. Gunshot wounds of joints and bones, their classification.

Classification of spinal injuries, their mechanogenesis. Clinical manifestations of injuries depending on their location. Providing medical care at the pre-hospital and hospital stages for various spinal injuries. Social and professional rehabilitation patients with injuries of the spine.

Classification of pelvic injuries and mechanogenesis of their formation. The clinical picture of differently pelvic injuries. Principles of providing medical care to patients at the prehospital stage. Methods of treatment and rehabilitation of patients with various types of pelvic injuries. Prolonged crushing syndrome, etiology, pathogenesis. Treatment at the pre-hospital and hospital stages. Classification, symptoms and diagnosis of gunshot wounds of joints and bones. First aid. Methods of treatment of open (gunshot) bone fractures and their complications. Prevention of complications.

Topic 4. Fractures of the lower extremity. Methods of conservative treatment in traumatology and orthopedics, indications and contraindications to surgical treatment.

Classification of fractures of the femur. Mechanisms of injury. Clinic, diagnosis. Providing medical care at the prehospital stage. Methods of treatment depending on the location of fractures and their types. Knee fractures, damage to the ligaments of the knee joint and menisci. The mechanism of injury, clinic, diagnosis, methods of treatment. Fractures of the tibia. Classification. Mechanism of injury, clinic, diagnosis and methods of treatment of tibial fractures. Fractures of the heel, heel bones, metatarsals and phalanges of the fingers. The mechanism of their damage. Clinic, diagnosis, treatment. Preventive and rehabilitation measures for fractures of the lower extremity.

**Section 3.**Degenerative-dystrophic diseases of the joints and spine. Pediatric orthopedics

Topic 1. Congenital deformities of the spine (scoliotic disease), muscular crooked neck. Curation of patients.

Congenital muscular crooked neck, Klippel-Feyl disease, Grizel's disease. wing-shaped scapula. Etiology, clinic. Principles of diagnosis and treatment. Pathogenesis of scoliotic disease. Classification of scoliosis. Clinic of different degrees of scoliosis. Prevention, conservative and operative methods of treatment. Work of students with patients. Collection of complaints, medical history and life. Objective examination of the patient. Entering data into the educational form of medical history.

Topic 2. Congenital bone deformities, congenital hip dislocation, clubfoot.

Congenital hip dislocation. Etiology, pathogenesis. Clinical and radiological diagnosis of congenital hip dislocation in old age. Features of its treatment. Prevention of congenital hip dislocation. Features of its treatment in different age groups. Congenital clubfoot. Etiology, pathogenesis. Clinic, diagnosis. Methods of conservative and surgical treatment,

Topic 3. Osteochondrosis of the spine, osteoarthritis. Clinic, diagnosis, treatment. Protection of educational history

diseases. Differentiated credit.

Classification, etiology, pathogenesis of osteochondrosis and its stages. Syndromes in osteochondrosis of the cervical, thoracic and lumbar spine. Principles of treatment of degenerative-dystrophic diseases of the spine. Etiology, pathogenesis of osteoarthritis, its classification. Clinic and diagnosis of different stages of osteoarthritis. Principles of treatment of osteoarthritis of the hip, knee and ankle joints.

Tasks for independent work:

−preparation for classroom classes (lectures, practical);

−performance of practical tasks during the semester;

−independent study of certain topics of the discipline;

−preparation and implementation of tasks provided by the program of practical training;

−preparation for all types of control ( differential credit).

**Discipline policy and values**

Discipline requirements

In order to successfully complete the relevant course, it is necessary to regularly attend practical classes; to have theoretical preparation for practical classes according to the subject; not to be late and not to miss classes; perform all necessary tasks and work on each lesson ; be able to work in a group; to address to the teacher on various questions on subjects of employment and to receive in the answer.

Students can discuss different tasks, but their performance is strictly individual. It is not allowed to write off, use various software, tips, use a mobile phone, tablet or other electronic gadgets during classes for purposes other than the educational process. Students are not allowed to be late for practical classes.

Expected that students attend all lectures and workshops. Written and homework must be completed completely and on time, if students have questions, you can contact the teacher in person or by e-mail, which the teacher will provide in the first practical lesson.

During the lecture, students are encouraged to keep a synopsis of the lesson and keep a sufficient level of silenc. Asking questions to the lecturer is perfectly normal.

Visiting patients during hospital treatment is possible provided that students have the appropriate form of clothing and in the absence of infectious diseases, according to the current epidemic situation.

Class attendance and behavior

If students missed classes, it is necessary to work it out (according to the schedule on the information stand of the department).

It is important for students to follow the rules of good behavior at the university. These rules are common to all, they also apply to the entire teaching staff and are not fundamentally different from the generally accepted norms.

During classes it is allowed:

- leave the audience for a short time if necessary and with the permission of the teacher;

- drink soft drinks;

- take photos of presentation slides;

- take an active part in the class (see Academic expectations of students).

forbidden:

- eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required);

- smoking, drinking alcohol and even low-alcohol beverages or drugs;

- use obscene language or use words that offend the honor and dignity of colleagues and faculty;

- gambling;

- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);

- shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

Academic Integrity Policy.

The Department of Traumatology and Orthopedics maintains zero tolerance for plagiarism. Students are expected to constantly increase their own awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

Policy for people with special educational needs.

Students with special needs can meet with the teacher or warn him before the start of classes, at the request of the student it can be done by the head of the group.

All students of KhNMU are protected by the Regulations on Prevention, Prevention and Settlement of Cases Related to Sexual Harassment and Discrimination at Kharkiv National Medical University, designed to define an effective mechanism for resolving conflict situations related to discrimination and sexual harassment.

KhNMU creates a space of equal opportunities free from discrimination of any national, racial or ethnic origin, sex, age, disability, religion, sexual orientation, gender, or marital status. All rights, privileges, programs and activities granted to students or staff of the University apply to all without exception, provided they are properly qualified. The anti-discrimination policy and the policy of counteracting sexual harassment of KhNMU are confirmed by the Code of Corporate Ethics and the Charter of KhNMU.

Recommendations for successful discipline

Active participation in the discussion of the audience, students should be ready to understand the material in detail, ask questions, express their views, discuss. During the discussion it is important:

- respect for colleagues,

- tolerance for others and their experience,

- receptivity and impartiality,

- the ability to disagree with the opinion, but to respect the personality of the opponent ,

- careful argumentation of his opinion and the courage to change his position under the influence of evidence,

- statements when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on their own thoughts and emotions,

- obligatory acquaintance with primary sources.

Incentives and penalties

A creative approach in its various manifestations. Students are expected to be interested in participating in city, national and international conferences, competitions and other events in the subject profile.

The individual independent work of the student for participation with reports in student conferences and in competitions, especially with reception of prize-winning places, for the publication of scientific works, for preparation of analytical reviews with presentations, for writing of the scientific abstract of the review of modern scientific literature on a subject in ECTS points is estimated. are added to the main points for PND of the student in the discipline as incentive (at the request of the student) in the amount of not more than 10 (the sum of points should not exceed 120 points).

Safety precautions.

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that everyone should know where the nearest evacuation exit is to the audience, where the fire extinguisher is, how to use it, and so on. Conducting briefings on "Anti-epidemic measures in educational institutions for the period of quarantine in connection with the spread of coronavirus disease" and clarification of individual prevention measures.

The procedure for informing about changes in the syllabus: the necessary changes in the syllabus are approved by the methodical commission of KhNMU on the problems of professional training of surgical profile and published on the site of KhNMU, the site of the Department of Traumatology and Orthopedics of KhNMU.

**Evaluation policy**

Assessment system and requirements (types of control, control methods, forms of control, criteria for assessing the level of knowledge, conditions of admission to the final control)

When studying the discipline, the current and final semester control is used. Also, there is a mandatory control of the assimilation of educational material of the discipline, attributed to independent work.

**Current control**(assimilation of certain topics) is carried out in the form of oral interviews, testing, conversations of students on predetermined issues, in the form of speeches of applicants for higher education with reports when discussing educational issues in practical classes.

In order to assess the independent work of students, an alternative option is offered *(optional)*: traditional types of tasks: writing a test, abstract or creative types: preparation of a multimedia presentation, the work of educational literature (annotation, review, citation, abstracts, lectures).

**The final semester control**in the discipline is a mandatory form of control of academic achievement of higher education. It is performed orally. The terms of the final semester control are set by the schedule of the educational process, and the amount of educational material that is submitted for the final semester control is determined by the curriculum of the discipline.

The final semester control is carried out after the completion of the discipline in the form of diff. credit:

- diff. credit - is conducted by the teacher of the academic group at the last lesson in the discipline and involves taking into account the IPA and checking the mastery of all topics in the discipline. Evaluation of diff. credit (or transitional differential credit) is determined in points from 70 to 120 and the mark diff. credit - "credited", "not credited".

Recalculation of the average score for current activities in a multi-point scale

for disciplines ending in a differentiated test

| 4-point scale | 200-point scale |  | 4-point scale | 200-point scale |
| --- | --- | --- | --- | --- |
| 5.00 | **120** | 3.91-3.94 | 94 |
| 4.95-4.99 | 119 | 3.87-3.9 | 93 |
| 4.91-4.94 | 118 | 3.83- 3.86 | 92 |
| 4.87-4.9 | 117 | 3.79- 3.82 | 91 |
| 4.83-4.86 | 116 | 3.74-3.78 | 90 |
| 4.79-4.82 | 115 | 3.7- 3.73 | 89 |
| 4.75-4.78 | 114 | 3.66- 3.69 | 88 |
| 4.7-4.74 | 113 | 3.62- 3.65 | 87 |
| 4.66-4.69 | 112 | 3.58-3.61 | 86 |
| 4.62-4.65 | 111 | 3.54- 3.57 | 85 |
| 4.58-4.61 | 110 | 3.49- 3.53 | 84 |
| 4.54-4.57 | 109 | 3.45-3.48 | 83 |
| 4.5-4.53 | 108 | 3.41-3.44 | 82 |
| 4.45-4.49 | 107 | 3.37-3.4 | 81 |
| 4.41-4.44 | 106 | 3.33- 3.36 | 80 |
| 4.37-4.4 | 105 | 3.29-3.32 | 79 |
| 4.33-4.36 | 104 | 3.25-3.28 | 78 |
| 4.29-4.32 | 103 | 3.21-3.24 | 77 |
| 4.25- 4.28 | 102 | 3.18-3.2 | 76 |
| 4.2- 4.24 | 101 | 3.15- 3.17 | 75 |
| 4.16- 4.19 | 100 | 3.13- 3.14 | 74 |
| 4.12- 4.15 | 99 | 3.1- 3.12 | 73 |
| 4.08- 4.11 | 98 | 3.07- 3.09 | 72 |
| 4.04- 4.07 | 97 | 3.04-3.06 | 71 |
| 3.99-4.03 | 96 | 3.00-3.03 | **70** |
| 3.95- 3.98 | 95 | **Less than 3.00** | **Not enough** |

Elimination of academic debt (working off).

If the sum of points is less than 50, the evaluation of the DR is determined by the criterion of "failed" and requires its re-assembly with the permission of the dean's office.

Provide students who have academic debt with an additional opportunity to eliminate it in their free time on Saturdays and during the holidays.

**16. Information resources**

1. University website : [www.knmu.kharkov.ua](https://translate.google.com/translate?hl=uk&prev=_t&sl=uk&tl=en&u=http://www.knmu.kharkov.ua)

2. Email of the department : [travma.hnmu@ukr.net](mailto:travma.hnmu@ukr.net)

3. Library : [http://libr@KHMU.kharkov.ua](https://translate.google.com/translate?hl=uk&prev=_t&sl=uk&tl=en&u=http://libr%40KHMU.kharkov.ua)

4. Discipline page in the Moodle system - [http://31.128.79.157:8083/course/index.php?categoryid=28](https://translate.google.com/translate?hl=uk&prev=_t&sl=uk&tl=en&u=http://31.128.79.157:8083/course/index.php%3Fcategoryid%3D28)