Department of physical rehabilitation, sports medicine, physical training

### Syllabus of the academic discipline «Sports medicine»

Scope of the	Total number of hours per discipline: 90 hours, 3.0 credits.					
academic	Semester: VII- VIII					
discipline	4th year of study					
Days, time,	According to the schedule of classes. Department of Physical					
place of	Rehabilitation, Sports Medicine, Physical Training Odesa, 4-A					
educational	Olgiyivska St., ONMedU Sports Complex, 2nd floor.					
discipline						
Teacher(s)	Iushkovska Olga. Head of the Department, Doctor of Medical					
	Sciences, Professor.					
	Plakida Oleksandr. Doctor of Medicine, Professor of the					
	Department.					
	Filonenko Olena. Candidate of Medical Sciences, Associate					
	Professor of the Department.					
	Kravets Svitlana. Assistant of the Department.					
	Semenenko Oleg. Assistant of the Department.					
	Kamo Shakhnazaryan. Assistant of the Department.					
Contact	Help by phone:					
information	Viktoriya Seredovska, head teacher of the department					
	0672857552					
	Viktoriya Radaeva, laboratory assistant of the department,					
	0973824140, +380(48) 723-05-68, +380 (48) 728-50-30					
	E-mail: sportmed@onmedu.edu.ua					
	Face-to-face consultations: from 15.00 to 17.00 every Thursday					
	according to the schedule. Online consultations: from 16.00 to					
	18.00 every Thursday according to the schedule.					
	A link to an online consultation is provided to each group during					
	classes separately.					

#### **COMMUNICATION**

Communication with applicants will be carried out in the classroom (in person). During distance learning, communication is carried out through the Microsoft Teams platform, as well as through e-mail correspondence, Viber messengers (through groups created in Viber for each group, separately through the group head).

### ABSTRACT OF THE EDUCATIONAL DISCIPLINE

The subject of the study of the discipline is the impact of physical culture and sports on health, physical development and functional capabilities of the body.

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

Department of physical rehabilitation, sports medicine, physical training

*Prerequisites:* (list of disciplines that must be studied prior to the discipline "Sports Medicine"): normal anatomy, normal physiology, pathological anatomy, pathological physiology, pharmacology, biochemistry, pediatrics, general surgery, clinical anatomy and operative surgery, medical psychology, propedeutics of internal medicine, traumatology and orthopedics, obstetrics and gynecology, neurology, emergency and urgent medical care.

Post-requisites: (list of disciplines for which the knowledge gained in the study of Sports Medicine is required): manual therapy, cosmetology, current problems in physiotherapy, balneology and rehabilitation, information technology in medicine, basics of reflectotherapy. The goal of the discipline: Mastering by the student of higher education knowledge and formation of elements of professional competences in the field of kinesiotaping in sports medicine and physical and rehabilitation medicine.

The goal of the discipline: Acquisition by the student of higher education of knowledge and formation of elements of professional competences in the field of sports medicine and improvement of skills and competences acquired during the study of previous disciplines.

Tasks of the discipline:

- 1. Familiarize yourself with the definition of terms from the discipline "Sports Medicine";
  - 2. Understand the purpose, tasks and main directions (aspects) of rehabilitation;
  - 3. Know the methodical principles of physical therapy;
- 4. Form an idea about physical rehabilitation in sports medicine; know its purpose and main tasks;
  - 5. Be able to apply medical (medical) control during health and sports training;
- 6. To master the methodology of complex medical examination of persons engaged in physical exercises;
- 7. To acquire knowledge on the analysis of the medical opinion based on the results of the examination, to solve the issue of admission to sports and physical culture, to carry out the distribution into medical groups;
- 8. Provide recommendations regarding the choice of the most optimal type of exercise, recreational and health-improving and training movement regimes depending on the physical condition;
- 9. To know the connection between an emergency and emergency medical care to know the mechanism of the positive effect of physical exercises in diseases of body systems;
- 10. To provide recommendations on medical and biological and other means of prevention of over fatigue and restoration of physical capacity during health training and in modern sports;
  - 11. Form modes of motor activity *Expected results:*

Department of physical rehabilitation, sports medicine, physical training

As a result of studying the academic discipline, the applicant must: *Know:* 

- Organization and procedure of medical examinations of persons engaged in physical culture and sports;
- Pathological conditions that precede pathological ones and occur during irrational physical education and sports;
  - Modern methods of research, diagnosis and treatment used in sports medicine. *Be able:*
- determine physical development, state of health, functional state and physical capacity and, based on this, recommend rational means and methods of physical exercises;
- to promote the correct conduct of physical exercise classes with persons of different ages, health conditions and physical fitness;
  - identify early signs of diseases and injuries that occur during irrational exercise;
- determine the most rational sanitary and hygienic conditions for physical exercises;
- to provide assistance for acute pathological conditions that occur with inadequate physical exertion;
- to carry out sanitary and educational work among physical athletes, athletes and the population;
- conduct medical and pedagogical observations during exercise classes in order to assess hygienic conditions, places where classes are held, assess the adequacy of the physical loads applied during classes, the functional state of the participants, the correctness of the construction and distribution of the load in the class, the density of classes, etc.

#### DESCRIPTION OF THE EDUCATIONAL DISCIPLINE

Forms and methods of education:

The discipline will be taught in the form of seminar classes (30 class hours); organization of independent work of the applicant (60 hours).

*Teaching methods:* conversation, narration, explanation, demonstration, instruction, training exercises.

#### Content of the academic discipline

# Content module 1 Modern ideas about sports medicine

- Topic 1. Basic concepts of sports medicine. Modern methods of examination of physical athletes and sportsmen.
- Topic 2. Basics of medical rehabilitation. Concept of medical control. Definition of medical rehabilitation. Means, types of medical rehabilitation. Aspects, tasks, stages of

Department of physical rehabilitation, sports medicine, physical training

medical rehabilitation. Methods of assessing the level of physical development. Peculiarities of physical development of athletes by sports.

## Content module 2 Assessment of body systems

- Topic 3. Changes in the body during exercise. Admission to physical education and sports, choice of individual movement mode. Quantitative assessment of the level of physical health. Express assessment of a person's physical condition. Determination and assessment of general physical capacity. Pre-pathological conditions and diseases that occur during irrational physical education and sports.
- Topic 4. Medical and pedagogical control in the process of physical exercises. Means of recovery and stimulation during health and sports training. Pharmacological drugs in sports. Herbal preparations in sports.

#### Content module 3

### Research of functional systems of the body and rehabilitation in case of diseases

- Topic 5. General characteristics of sportsmen's illness. Study of the respiratory system. Diseases and damage to organs of the cardiovascular system and the respiratory system during sports. Physical rehabilitation for diseases of the respiratory, cardiovascular and nervous systems. Characteristics of sports injuries. Brain and spinal cord injuries. Fractures, bruises, sprains. Physical rehabilitation in the internal medicine clinic.
- Topic 6. Basics of rational nutrition for athletes. Evaluation of the nutritional status of athletes depending on the types of sports. Basics of adaptive nutrition for athletes.
  - Topic 7. The concept of doping. Doping control.

#### List of recommended literature:

Basic:

- 1. European Physical and Rehabilitation Medicine Bodies Alliance. White Book on Physical and Rehabilitation Medicinein Europe. Eur J Phys Rehabil Med 2018. Vol.54(2). P.125-321
- 2. Gutenbrunner C., Tederko P., Grabljevec K., Nugraha B., Responding to the World Health Organization Global DisabilityAction Planin Ukraine: developing a National Disability, Healthand Rehabilitation Plan J Rehabil Med. 2018 (50). P.338–341
- 3. World Health Organization. Rehabilitation 2030: a callforaction: Meetingreport [Internet]. WHO; 2017. Available from: <a href="http://www.who.int/disabilities/care/rehab-2030/en/">http://www.who.int/disabilities/care/rehab-2030/en/</a>
- 4. WHO WHO global disability action plan 2014-2021 [Internet]. WHO. [cited 2014 Oct 21]. Available from: <a href="http://www.who.int/disabilities/actionplan/en/">http://www.who.int/disabilities/actionplan/en/</a>

Department of physical rehabilitation, sports medicine, physical training

#### Additional:

- 1. R.L. Braddom. Physical Medicine and Rehabilitation / R.L. Braddom. England: Elsevier Science, 2011. 1536 c.
- 2. WHO World Reporton Disability [Internet]. WHO. [cited 2014 Nov 8]. Available from: <a href="http://www.who.int/disabilities/world\_report/2011/en/">http://www.who.int/disabilities/world\_report/2011/en/</a>
- 3. European Union of Medical Specialists (UEMS) Section of Physical&Rehabilitation Medicine: A position paper on physical and rehabilitation medicine in acutesettings./ Ward A., Gutenbrunner C., Damjan H., Giustini A., Delarque A. // J Rehabil Med. 2010 (42): P.417–424.
- 4. DeLisa's. Physical Medicine and Rehabilitation / DeLisa's. Lippincott Williams&Wilkins; Fifth, North Am, 2010. 2432 c.

#### **ASSESSMENT**

Forms and methods of current control: oral (questionnaire), theoretical testing, evaluation of test performance, evaluation of activity in the classroom.

Criteria for current assessment in practical classes

~ .	
Grade	Evaluation criteria
«5»	The applicant worked systematically during the semester, showed versatile and
	deep knowledge of the program material, was able to successfully complete the
	tasks provided for by the program, mastered the content of basic and additional
	literature, realized the relationship between individual sections of the discipline,
	their importance for the future profession, revealed creative abilities in the mind
	using educational and program material that has shown the ability to i update
	and replenish knowledge dependently.
«4»	The applicant has revealed full knowledge of the educational and program
	material, successfully fulfills the tasks stipulated by the program, mastered the
	basic literature recommended by the program, showed a sufficient level of
	knowledge in the discipline and can independently update and update them in
	the course of further education and professional activity.
«3»	The applicant has shown knowledge of the main educational and program
	material to the extent necessary for further education and subsequent work in
	the profession, copes with the tasks provided for by the program, made some
	mistakes in the answers to the exam and when performing test tasks, but has the
	necessary knowledge to overcome the mistakes made under the guidance of a
	scientific and pedagogical worker.
«2»	The applicant did not reveal sufficient knowledge of the main educational and
	program material, made fundamental mistakes in implementing the tasks
	provided for by the program, could not use knowledge in further training
	without the help of a teacher, and could not master the skills of independent
	work.

Department of physical rehabilitation, sports medicine, physical training

Forms and methods of final control: a credit is given to an applicant who has completed all sections of the educational program of the elective discipline, actively participated in seminars, has a current average grade of at least 3.0 and has no academic debt.

Possibility and conditions for receiving additional (bonus) points: not provided.

#### INDEPENDENT WORK OF HIGHER EDUCATION ACQUIRES

Independent work involves preparation for each seminar session.

#### EDUCATIONAL DISCIPLINE POLICY

Deadlines and Rescheduling Policy:

Absences of classes for non-respectable reasons are made up according to the schedule of the teacher on duty.

Absences due to valid reasons are processed according to an individual schedule with the permission of the dean's office.

Policy on academic integrity:

- It is mandatory for applicants to observe academic integrity, namely:
- independent performance of all types of work, tasks, forms of control provided for by the work program of this academic discipline;
- references to sources of information in the case of using ideas, developments, statements, information;
  - compliance with the legislation on copyright and related rights;
- provision of reliable information about the results of one's own educational (scientific) activity, used research methods and sources of information.

The following are unacceptable in educational activities for participants of the educational process:

- using family or official ties to obtain a positive or higher grade during any form of control of learning results or advantages in scientific work;
  - use of prohibited auxiliary materials or technical means (cheat sheets, notes,
  - micro-earphones, telephones, Smartphone, 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 assessment of control work, assessment in class, credit, etc.;
  - repeated evaluation (test, credit, etc.);
- appointment of additional control measures (additional individual tasks, control works, tests, etc.);
  - additional inspection of other works authored by the violator. *Attendance and Tardiness Policy:*

Department of physical rehabilitation, sports medicine, physical training

*Uniform:* 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: applicants suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend classes.

A student who is late for class can attend it, but if the teacher has put "abs" in the journal, he must complete it in the general order.

Use of mobile devices:

Students with the permission of the instructor may use mobile devices if they are needed to complete the assignment.

Behavior in the audience:

The behavior of applicants and teachers in the classrooms should be working and calm, strictly comply with the rules established in accordance with the Code of Academic Ethics and Relations of the University Community of Odesa National Medical University.