

MINISTRY OF HEALTH CARE OF UKRAINE

ODESA NATIONAL MEDICAL UNIVERSITY

Department of physical rehabilitation, sports medicine and physical training

APPROVED

Vice-rector for scientific and pedagogical work

Eduard BURYACHKIVSKY

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**WORK PROGRAM OF THE DISCIPLINE
«POWER FITNESS »**

Level of higher education: second (master's)

Field of knowledge: 22 «Health care»

Specialty: 221 «Dentistry»

Educational and professional program: Dentistry

Work program based on the educational and professional program of the second level of higher education for the preparation of masters in specialty 221«Dentistry»of 22 «Health» area of knowledge, improved by scientific council of ONMedU (Protocol № 10 of June 27, 2024)

DEVELOPERS:

Head of the Department MD, Professor Iushkovska O.G.

Senior teacher Korostylova H.Y.

The work program was approved at the meeting of the Department of physical rehabilitation, sports medicine and physical education
Protocol№ 1 dated 08.26.2024.

Head of the department



Olga IUSHKOVSKA

Approved by the guarantor of
the educational and professional program



Anatoly GULIUK

Approved by the subject cycle methodical commission for on medical-biological disciplines of ONMEDU

Protocol № 1 dated 08.27.2024.

Head of the subject cycle methodical commission on medical-biological disciplines of ONMEDU



Leonid GODLEVSKY

Reviewed and approved at the meeting of the department _____

Protocol №. __ dated _____ . ____ 20____

Head of the department _____ Olga IUSHKOVSKA

Reviewed and approved at the meeting of the department _____

Protocol №. __ dated _____ . ____ 20____

Head of the department _____ Olga IUSHKOVSKA

1. Description of the discipline

Name of indicators	Area of knowledge, Specialty, Level of higher education	Characteristics of the discipline	
Total number of: Credits – 3 Hours – 90 Content module – 2	22 «Health»	<i>Full-time education, daily</i>	
	222 «Dentistry »	<i>Selective</i>	
	Second (master's) level of higher education		<i>Year of preparation: 5</i>
			<i>Semester IX -X</i>
			<i>Lectures (0 hours)</i>
			<i>Seminar (30 hours)</i>
			<i>Laboratory work (0 hours)</i>
			<i>Independent work (60 hours)</i> <i>Including individual task (0 hours)</i>
	<i>Form of final control - Credit</i>		

2. The purpose and tasks of the educational discipline, competences, program learning outcomes.

Objective: Mastering by the applicant of higher education of knowledge and formation of elements of professional competencies and practical skills in the field of physical education on the basis of specialized modern scientific achievements in the field of physical education and health.

Tasks:

1. Preservation and strengthening of students' health, promoting a healthy lifestyle, maintaining and increasing the level of performance during training.
2. Fostering the need for systematic physical exercises in applicants, taking into account the characteristics of their future professional activities and physical self-improvement.
3. Mastering the methods of assessing physical development, functional state and self-control during physical exercises.
4. Obtaining the necessary knowledge, skills and abilities in the use of physical culture for the prevention of diseases, restoration and strengthening of health, continuation of professional activity of the working population.
5. Formation of understanding of the role of physical culture in the development of personality and its preparation for professional activity, motivational and value attitude to physical culture, healthy lifestyle, physical improvement and self-education, the need for regular exercise and sports.
6. Formation of a system of knowledge and skills in physical culture and healthy lifestyle;
7. Strengthening health, promoting the formation of comprehensive development of the body, preventing diseases, ensuring the optimal level of physical fitness, physical performance, functional state during the training period.
8. Mastering the system of practical skills and abilities to practice the main types of physical exercises and forms of rational physical activity.
9. Ensuring, preserving and strengthening health, development and improvement of psychophysical capabilities, qualities and properties of the individual.
10. Acquisition of motor skills and abilities, ensuring general and professional-applied physical fitness.
11. Gaining experience in the creative use of physical culture and sports activities.
12. Acquiring the ability to perform tests and standards of physical fitness.
13. Improving the sportsmanship of applicants-athletes.

- General competencies (GC):

- GC1. Ability to think abstractly, analyze and synthesize.
 GC2. Knowledge and understanding of the subject area and understanding of professional activities.
 GC3. Ability to apply knowledge in practice.
 GC4. Ability to communicate in the state language both orally and in writing.

- GC6. Skills in the use of information and communication technologies.
- GC7. Ability to search, process and analyze information from various sources.
- GC8. Ability to adapt and act in a new situation.
- GC9. Ability to identify, pose and solve problems.
- GC10. Ability to be critical and self-critical.
- GC11. Ability to work in a team.
- GC12. The desire to preserve the environment.
- GC13. Ability to act socially responsibly and consciously.
- GC14. Ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.
- GC15. Ability to preserve and increase moral, cultural, scientific values and achievements of society based on an understanding of the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, to use various types and forms of physical activity for active recreation and healthy lifestyle
- GC16. Ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty.

- Special (SC):

- SC6. Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial region.
- SC13. Ability to assess the impact of the environment on public health (individual, family, population).
- SC15. Processing of state, social and medical information.

Programmatic learning results (PLR):

PLR2. Collect information about the general condition of the patient, assess the psychomotor and physical development of the patient, the condition of the maxillofacial organs, evaluate information about the diagnosis based on the results of laboratory and instrumental studies (according to list 5).

PLR3. To prescribe and analyze additional (mandatory and optional) methods of examination (laboratory, radiological, functional and/or instrumental) according to the list of 5, patients with diseases of organs and tissues of the oral cavity and maxillofacial region for differential diagnosis of diseases (according to list 2).

PLR14. Analyze and evaluate government, social and medical information using standard approaches and computer information technology

PLR15. Assess the impact of the environment on public health in a medical institution using standard methods

PLR16. Formulate goals and determine the structure of personal activities based on the results of the analysis of certain social and personal needs.

PLR17. To adhere to a healthy lifestyle, to use methods of self-regulation and self-control

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

Know:

- Fundamentals of organization and methods of the most effective types and forms of rational motor activity and the ability to apply them in practice in their physical activity;
- Fundamentals of methods of health improvement and physical improvement by traditional and non-traditional means and methods of physical culture;
- Fundamentals of professional and applied physical training and be able to apply them in practice;

Be able to:

- Apply systematic physical training of health or sports orientation;
- Compose complexes of morning hygienic gymnastics, physical education pause and minute, a set of physical exercises aimed at strengthening the muscular corset; complexes of

physical exercises that promote the development of flexibility, speed, general endurance and strength, complexes of physical exercises to restore mental fatigue;

- Laying the foundations for a healthy lifestyle, improving living standards and preventing dysfunction in the course of life.

3. The content of the discipline.

Content module 1.

Power fitness.

Topic 1. Power fitness with arbitrary weights. Construction and performance of a complex of exercises for development of muscles of legs. Construction and performance of a set of exercises for the development of the shoulder girdle and pectoral muscles, back muscles. Building and performing a set of exercises for the development of basic exercises for individual muscle groups, exercises for the development of muscle strength of the whole body. Building and performing a set of exercises with dumbbells; with a barbell; with weights.

Topic 2. Strength fitness with the use of simulators. Study of the properties of simulators. Study of movements on simulators. Construction and implementation of an individual set of exercises on simulators. Combined strength training.

Content module 2.

Complex types of fitness training.

Topic 3: Interval training (Tabata). Construction and performance of a complex of exercises with the use of step platforms. Construction and performance of a complex of exercises with the use of fitballs, rubber shock absorbers. Construction and performance of a complex of exercises with the use of simulators, gymnastic equipment, dumbbells and medicine balls.

Topic 4. Functional training. Construction and performance of a complex of exercises with the use of step-platforms. Construction and performance of a complex of exercises with the use of fitballs, rubber shock absorbers. Construction and performance of a complex of exercises with the use of simulators, gymnastic equipment, dumbbells and medicine balls.

Topic 5. Circular training. Construction and performance of a complex of exercises with the use of step-platforms. Construction and performance of a complex of exercises with the use of fitballs, rubber shock absorbers. Construction and performance of a complex of exercises with the use of simulators, gymnastic equipment, dumbbells and medicine balls.

4. Structure of the academic discipline

Names of topics	Number of hours				
	Total	including			
lectures		seminars	practical	laboratory	IWS
Content module 1.					
Power fitness					
Topic 1. Strength fitness with free weights. Building and performing a set of exercises for the development of leg muscles. Construction and performance of a complex of exercises for the development of the shoulder girdle and pectoral muscles, back muscles. Building and performing a set of exercises for the development of basic exercises for individual muscle	20	0	0	8	12

groups, exercises for the development of muscle strength of the whole body. Building and performing a set of exercises with dumbbells; with a barbell; with weights.						
Topic 2. Strength fitness with the use of simulators. Study of the properties of simulators. Study of movements on simulators. Construction and implementation of an individual set of exercises on simulators. Combined strength training.	20	0	0	8		12
<i>Total content module 1</i>	40	0	0	16	0	24
Content module 2. Complex types of fitness training.						
Topic 3: Interval training (Tabata). Construction and performance of a complex of exercises with the use of step platforms. Construction and performance of a complex of exercises with the use of fitballs, rubber shock absorbers. Construction and performance of a complex of exercises with the use of simulators, gymnastic equipment, dumbbells and medicine balls.	16	0	0	4		12
Topic 4. Functional training. Construction and performance of a complex of exercises with the use of step-platforms. Construction and performance of a complex of exercises with the use of fitballs, rubber shock absorbers. Construction and performance of a complex of exercises with the use of simulators, gymnastic equipment, dumbbells and medicine balls.	18	0	0	6		12
Topic 5. Circular training. Construction and performance of a complex of exercises with the use of step-platforms. Construction and performance of a complex of exercises with the use of fitballs, rubber shock	16	0	0	4		12

absorbers. Construction and performance of a complex of exercises with the use of simulators, gymnastic equipment, dumbbells and medicine balls.					
<i>Total content module 2</i>	50			14	36
Total hours:	90			30	60

5. Topics of lectures / seminars / practical / laboratory classes

5.1. Topics of lectures

Lectures are not provided.

5.2. Topics of seminars

Seminars are not provided.

5.3. Topics of practical classes

6. Themes of practical classes

№ /or	Theme name	Number of hours
1.	Topic 1. Practical class 1. Power fitness with arbitrary weights. Building and performing a set of exercises for the development of leg muscles.	2
2.	Topic 1. Practical class 2. Power fitness with arbitrary weights. Building and performing a set of exercises for the development of the shoulder girdle and chest muscles, back muscles.	2
3.	Topic 1. Practical class 3. Power fitness with arbitrary weights. Construction and implementation of a set of exercises for the development of basic exercises for individual muscle groups, exercises for the development of muscle strength of the whole body.	2
4.	Topic 1. Practical class 4. Power fitness with arbitrary weights. Building and performing a set of exercises with dumbbells; with a barbell; with weights.	
5.	Topic 2. Practical class 5. Power fitness with the use of simulators. Study of the properties of simulators.	2
6.	Topic 2. Practical class 6. Power fitness with the use of simulators. Study of movements on simulators.	2
7.	Topic 2. Practical class 7. Power fitness with the use of simulators. Building and performing an individual set of exercises on simulators.	2
8.	Topic 2. Practical class 8. Power fitness with the use of simulators. Combined strength training.	2
9.	Topic 3. Practical class 9. Interval training (Tabata). Construction and implementation of a set of exercises using step platforms, fitballs and elastic shock absorbers.	2
10	Topic 3. Practical class 10. Interval training (Tabata). Building and performing a set of exercises using simulators, gymnastic equipment, dumbbells and medicine balls.	2
11.	Topic 4. Practical class 11. Functional training. Building and performing a set of exercises using step platforms.	2

12.	Topic 4. Practical class 12. Functional trainings. Construction and performance of a set of exercises with the use of fitballs, elastic shock absorbers.	2
13.	Topic 4. Practical class 13. Functional trainings. Building and performing a set of exercises using simulators, gymnastic equipment, dumbbells and medicine balls.	2
14.	Topic 5. Practical class 14. Circular training. Building and performing a set of exercises using step platforms, fitballs, elastic shock absorbers.	2
15.	Topic 5. Practical class 15. Circular training. Construction and performance of a complex of exercises with the use of simulators, gymnastic equipment, dumbbells and medicine balls.	2
	Total:	30

5.4. Topics of laboratory classes

Laboratory classes are not provided.

6. Independent work of the applicant for higher education

№ i/or	Theme name	Number of hours
1.	Topic 1. Preparation for practical classes 1-4	12
2.	Topic 1. Preparation for practical classes 5 –8	12
3.	Topic 1. Preparation for practical classes 9 - 10	12
4.	Topic 1. Preparation for practical classes 11 - 13	12
5.	Topic 1. Preparation for practical classes 14 - 15	12
	Total:	60

7. Teaching methods

Practical classes: conversation, narration, explanation, demonstration, instruction, exercises, training exercises.

Independent work:

- independent work with methodological developments, recommended basic and additional literature, information resources of the department, preparation for classroom classes; - independent performance of an additional (bonus) research task of the applicant, preparation of a scientific report at a meeting of a scientific circle, conference, preparation and publication of abstracts of the applicant's scientific work, participation in an interuniversity olympiad, competition of scientific works.

8. Forms of control and assessment methods

(Including criteria for assessing learning outcomes)

Current control: attendance at class, physical fitness testing.

Final control: credit.

Assessment of current learning activities in the practical class:

Assessment of practical skills on the topic of the lesson:

- Methods: assessment of the correctness of practical skills

- Maximum grade - 5, minimum grade - 3, unsatisfactory grade - 2.

The grade for one practical lesson is the arithmetic mean of all components and can only have an integer value (5, 4, 3, 2), which is rounded by the statistical method.

Current evaluation criteria in practical training

Assessment	Criteria for the assessment
«5»	The applicant systematically worked during the semester, successfully completed test tasks on physical fitness, freely performed practical tasks provided by the curriculum, mastered the content of basic and additional literature, realized the interconnection of individual sections of the discipline, their importance for the future profession, showed creativity in understanding and using the educational and program material, showed the ability to independently update and replenish knowledge, showed creativity in understanding and creative use of acquired knowledge and skills.
«4»	The applicant has demonstrated complete knowledge of the curriculum material, performs well in the physical fitness tests provided by the program, has mastered the basic literature recommended by the program, has shown a sufficient level of knowledge of the discipline and is capable of updating and updating them independently in the course of further study and professional activity.
«3»	The applicant has demonstrated knowledge of the basic educational and program material to the extent necessary for further study and subsequent work in the profession, satisfactorily copes with the test tasks on the level of physical fitness provided by the program. Significant errors in the performance of practical tasks are possible, but the student is able to eliminate them with the help of the teacher.
«2»	The applicant has not demonstrated sufficient knowledge of the basic curriculum material, has made fundamental mistakes in the performance of the tasks provided for in the program, unsatisfactorily performs the test tasks on physical fitness provided for in the program, cannot use the knowledge in further studies without the help of the teacher, has not been able to master the skills of independent work.

Assessment of independent work of applicants:

Students' independent work is assessed during the current control of the topic in the relevant class. Mastery of topics that are submitted only for independent work is checked during classroom classes.

Credit is given to an applicant who has completed all the tasks of the work program of the discipline, actively participated in seminars, completed and defended an individual assignment and has a current average grade of at least 3.0 and has no academic debt.

The test is given: at the last class before the examination session - in the case of the tape system of education, at the last class - in the case of the cycle system of education. The grade for the test is the arithmetic mean of all components on a traditional four-point scale and has a value that is rounded according to the statistical method with two decimal places.

9. Distribution of grades received by undergraduate applicants

The obtained grade point average for the discipline for students who have successfully completed the work program of the discipline is converted from the traditional four-point scale to points on a 200-point scale, as shown in the table:

Table of conversion of traditional assessment into multi-point

Traditional four-point scale	Multipoint 200-point scale
Excellent («5»)	185 – 200
Good («4»)	151 – 184
Satisfactory («3»)	120 – 150
Unsatisfactory («2»)	Below 120

The multi-point scale (200-point scale) characterizes the actual performance of each student in mastering the educational component. The conversion of the traditional grade (grade point average) into a 200-point scale is performed by the University's Information Technology Department.

According to the points received on a 200-point scale, the achievements of applicants are evaluated according to the ECTS rating scale. Further ranking according to the ECTS rating scale allows evaluating the achievements of applicants in the educational component who study in the same course of one specialty, according to the points they received.

The ECTS scale is a relative and comparative rating scale that establishes the applicant's belonging to the group of the best or worst among the reference group of fellow students (faculty, specialty). Grade A on the ECTS scale cannot be equal to grade A, and grade B cannot be equal to grade B, etc. When converting from a multi-point scale, the limits of grades "A", "B", "C", "D", "E" on the ECTS scale do not coincide with the limits of grades "5", "4", "3" on the traditional scale. Applicants who have received grades "FX" and "F" ("2") are not included in the list of ranked applicants. The grade "FX" is assigned to applicants who have scored the minimum number of points for current academic activities, but who have not been credited with the final control. The grade "F" is assigned to applicants who have attended all classes in the discipline, but have not gained an average score (3.00) for current academic activities and are not allowed to take the final control.

Applicants enrolled in the same course (one specialty), based on the number of points gained in the discipline, and are ranked on the ECTS scale as follows:

Conversion of the traditional discipline grade and the sum of the ECTS scale scores

Assessment on the ECTS scale	Statistical indicator
A	The best 10% of the student
B	The next 25% of the student
C	The next 30% of the student
D	The next 25% of the student
E	The next 10% of the student

10. Methodological support

- Work program of the discipline
- Syllabus

Educational and methodical literature:

- Methodical developments for seminars
- Methodical recommendations for independent work of higher education students
- Physical fitness assessment tests.

11. Questions for preparation for the final control

Not provided by the program

12. Recommended literature

Main literature:

1. Lee Boyce., Melody L.Schoenfeld. Strength Training for All Body TypesThe Science of Lifting and Levers\2023Page Count: 288 ISBN: 9781718212671
2. Human Kinetics. Canada. Strength Training for All Body Types\2024 Page Count: 288ISBN: 9781718216891
3. Alwyn Cosgrove, Craig Rasmussen. Secrets of Successful Program DesignA How-To Guide for Busy Fitness Professionals\2021Page Count: 272ISBN: 9781492593225

Additional literature:

1. Dudnyk I.O Formation of volitional qualities in students in the process of physical education: a study guide / IO Dudnyk; MESU, B. Khmelnsky Cherkassy National University - Cherkassy: B. Khmelnsky ChNU, 2016. - 72 p.
2. Yezhova O.O. Healthy lifestyle: a textbook for students of vocational schools / O.O. Yezhova; MESU; Academy of Pedagogical Sciences of Ukraine, Institute of Education Problems of the Academy of Pedagogical Sciences of Ukraine.
3. Mykhaliuk, E.L. Medical and pedagogical observations in the process of physical education and

sports classes: a textbook / E.L. Mykhaliuk, V.V. Klapchuk - Zaporizhzhia: ZSMU, 2016. 81p.

13. Information resources

- <https://wvumedicine.org/wellness/resources/online-fitness-resources/>
- <https://powerfitnessandnutrition.com>
- <https://www.youtube.com/watch?v=cLJfmPaKb1M>
- https://www.youtube.com/watch?v=mpL7e0_jLXQ