

**Odessa National Medical University**

**Medical faculty №2**

**Department of Physical Rehabilitation, Sports Medicine, Physical Training and Valeology**

**SYLLABUS OF ACADEMIC DISCIPLINE**

**«VALEOLOGY»**

<b>Course scope</b>	Faculty of Medical - 3.0 ECTS credits, 90 hours.
<b>Semester, year of study</b>	I year , II semester
<b>Days, time, location</b>	According to the schedule.
<b>Teachers</b>	1. Iushkovska Olga. Head of the department, doctor of medical sciences, professor <a href="mailto:med_rehab@ukr.net">med_rehab@ukr.net</a> 2. Seredovskaya Victoria. Senior teacher, head of the Academic Unit. <a href="mailto:sered63@ukr.net">sered63@ukr.net</a> 3. Burdin Igor. Senior lecturer, responsible for sports and mass activities. <a href="mailto:burdin0102@gmail.com">burdin0102@gmail.com</a> 4. Korostylova Hanna. Senior teacher, methodologist of the department, curator of the section Sport of athletics. <a href="mailto:ankor-2006@ukr.net">ankor-2006@ukr.net</a> 5. Afanasyev Sergey. Senior teacher, curator of the sports section of football. <a href="mailto:afonya8@ukr.net">afonya8@ukr.net</a> 6. Kolesnichenko Alexander. Senior teacher, curator of the sports section of table tennis and weightlifting. <a href="mailto:kolesnichenkoaleksandr21@gmail.com">kolesnichenkoaleksandr21@gmail.com</a> 7. Chikin Alexander. Senior teacher, curator of the sports section of chess. <a href="mailto:chikina72@gmail.com">chikina72@gmail.com</a> 8. Parkhomenko Irina. Teacher, curator of the sports section of karate and boxing. <a href="mailto:irinakomar34@gmail.com">irinakomar34@gmail.com</a>
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<b>E-mail</b>	<a href="mailto:sportmed@onmedu.edu.ua">sportmed@onmedu.edu.ua</a>
<b>Teacher's workplace</b>	Department of Physical Rehabilitation, Sports Medicine, Physical Training and Valeology, address: Odessa, street Olgievskaya, 4-A.
<b>Counseling for students</b>	Thursday - 15.00 - 17.00. Saturday - 9.00 - 12.00. Conducted by the next teacher according to the schedule of shifts. (For the period of quarantine - by E-mail of the department: <a href="mailto:sportmed@onmedu.edu.ua">sportmed@onmedu.edu.ua</a> , as well as using Viber, Facebook and Telegram messengers and the use of the Zoom platform and / or Microsoft Teams).

**COMMUNICATION**

The system of organization of classes, is carried out with the help of E-mail department: [sportmed@onmedu.edu.ua](mailto:sportmed@onmedu.edu.ua), as well as with the help of messengers Viber, Facebook and Telegram and the use of the platform Zoom and / or Microsoft Teams.

**COURSE ANOTATION**

"Valeology," as an academic discipline in medical institutions of higher education, is the science of a healthy way of life, studying the level, reserves, and potential of human mental and physical health, as well as the ways and methods of strengthening and preserving it.

A healthy lifestyle involves avoiding bad habits, proper nutrition, sports, and a rationally organized mode of rest and work.

Valeology is closely connected with other sciences. It is on the border with physiology, psychology, pedagogy, hygiene, anatomy, sociology.

The subject of valeology research is the individual health of man, his mechanisms and their management.

The object of valeology is individuals who are in the range of health. In other words, we can say that the object of valeology is considered a practically healthy person and a person who is in front of a disease state. Valeology analyzes individual health as a separate medico-social group, the essence of which can be characterized by qualitative and quantitative indicators.

**Course prerequisites:** is based on students' study of medical biology, biophysics, biochemistry, ethics, philosophy, ecology, human anatomy, normal and pathological physiology and is integrated with these disciplines;

**Post requisites of the course:** provides a foundation for students to study life safety, valeology, physical rehabilitation, sports medicine and the formation of skills to apply knowledge of physical health in the further study of all clinical disciplines and in future professional activities.

**The purpose of teaching the discipline "Valeology" is:** the formation of valeological culture, a sense of responsibility for their own state of health and other people, the formation of positive motivation for a healthy lifestyle.

**Expected results.**

**As a result of studying the discipline, higher education seekers must**

***know:***

- basics 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;
- basics of methods of health improvement and physical improvement by traditional and non-traditional means and methods of physical education;
- basics of professional-applied physical training and be able to apply them in practice;
- basics of physical education of different population groups;
- factors that determine the state of health;
- negative environmental factors and ways to minimize their negative impact on human health;
- principles of rational nutrition and the impact of nutrition on diseases;
- causes, ways of infection, the emergence and prevention of infectious diseases.

***be able to:***

- apply systematic physical training with a health-improving or athletic orientation;
- to make complexes of morning hygiene gymnastics, physical culture pause and minute, a complex of physical exercises aimed at strengthening the muscular corset; complexes of physical exercises that contribute to the development of flexibility, speed, general endurance and strength, complexes of physical exercises to restore the capacity for mental fatigue;
- provide a foundation for a healthy lifestyle, improve the standard of living and prevention of dysfunction in the course of life.
- foresee the possible effects of a sedentary lifestyle on human health and the occurrence of diseases;
- give competent recommendations for a healthy lifestyle and rational nutrition;
- prevent infectious diseases, in particular those of social importance;
- make an individual daily routine in accordance with biorhythms;
- to choose appropriate forms and methods of physical and mental health formation for the individual;
- choose adequate methods of physical health improvement.

## **COURSE DESCRIPTION**

### **Forms and methods of teaching**

The course will be taught as lectures (20 hours), practical classes (20 hours) and CDS (50 hours).

The following teaching methods will be used: visual (multimedia presentations, schemes, tables); practical classes with mannequins, individual independent tasks.

### **The content of the discipline**

#### **1. Basics of a healthy lifestyle.**

**Topic 1.** Valeology as a science. The concept of a person's physical health. Valeology as a science of the health of a healthy person: purpose, objectives, object, subject of study. The history

of development. The place of valeology in the system of sciences of health, connection with preventive medicine and other sciences. Modern concepts of human health and the factors that determine it. The structure of the contribution of factors in the formation of health. Lifestyle: definition and content of the concept. Defining and accompanying conditions of life. Categories of living conditions. Healthy way of life. Leading components of a healthy lifestyle. The formation of a healthy lifestyle: the main stages and their content. Ways of motivation to a healthy lifestyle. Methods and forms of promotion of a healthy lifestyle. Methods, ways and means of maintaining health. Evaluation and components of health.

**Topic 2.** Harmful habits and human health. Harmful habits and their prevalence among the population. Factors of addiction. The tendency of risky behavior, methods of its diagnosis. Mechanism of development of nicotine, alcohol and drug addiction and substance abuse. Smoking and its impact on human health. Tobacco smoke and its components. Passive smoking and its impact on health. Addiction and substance abuse, general concepts and definitions. Characteristics of the formation of drug addiction when using various narcotic substances. Characteristics of the pharmacological effects of the main types of drugs on the human body. Social and medical consequences of addiction to drugs. Alcohol and its effect on the physical and mental health of the person. Phases of development of the disease of alcoholism. Prevention of alcohol addiction. The basic principles, methods and measures of prevention of addictive conditions.

Biological potential of health: heredity and adaptation. Adaptation. Types of adaptation. Non-specific reactions of the body. Heredity. Mechanisms and patterns of heredity.

**Topic 3.** Peculiarities of the development of children and adolescents - ways of forming and strengthening health. The concept of development and stages of age. The formation of a healthy lifestyle. The basic elements of a healthy lifestyle. Hygiene of nutrition. Proper breathing. Rational mode of work and rest.

The concept of biorhythms and their significance for human health. Biorhythms. Types of biorhythms. Importance of biorhythms for the organism. Violation of synchronism of biorhythms. Effects on human life and health.

## **2. Medical and social foundations of health.**

**Topic 4.** Movement and health. Evolutionary prerequisites of motor activity. Physiological basis of physical culture. Motor skills and motor qualities. Characteristics of the states occurring during physical activity. Organization, content and methods of physical training in health work. General effects of physical training. Principles of physical training. The concept of the load. Accounting for the current state of the body in the organization of health physical education. The place of motor activity in human activity. Age features of motor activity. The place of physical activity in maintaining and strengthening the level of health of adults.

Ways of determining the physical health of schoolchildren. Physical development. Physical health. Methods for assessing the state of physical health. The level of physical health. The impact of physical education on the state of health.

**Topic 5.** Methods of diagnosis and prevention of the musculoskeletal system. Classification, diagnosis, prevention and correction of diseases of the musculoskeletal system. Causes of diseases. Symptoms. Therapeutic physical training. Vitamins.

Valeological assessment of the functional state of the respiratory and cardiovascular systems. Vital capacity of the lungs. Stange test Genchy test. Functional indices. Functional disorders of the cardiovascular system in schoolchildren and their prevention. Risk factors for cardiovascular disorders in modern schoolchildren. Effect of teaching conditions on the functional state of the cardiovascular system of modern schoolchildren.

### ***List of recommended reading***

#### ***Main literature:***

1. Valeology: lectures course / I.I. Barak [etc.]. - Vitebsk: VSMU, 2008. - 164 p.
2. Annand, N.K. Personal hygiene for nurses / N.K. Annand, Sh. Goel. - India, A.I.T.B.S. Publishers, 2008. - 254 p.
3. Promotion of physical activity in the European Region: content analysis of 27 national policy documents / Signe B. Daugbjerg [et al.] // J. of Physical Activity and Health. - 2009. - № 6. - P. 805-817.

4. Health education in self-care: possibilities and limitations. Report of a Scientific Consultation. Geneva, 21-25 Nov, 1983. - Health Education Service, Division of Public Information and Education for Health. - 24 p.

5. WHO Sexual and Reproductive Health Medium-term Strategic Plan for 2010-2015 and Programmer Budget for 2010-2011. - Geneva: WHO, Dept., of Reproductive Health and Research. - 2010. - 91 p.

6. Steps to health: European framework to promote physical activity for health. - Copenhagen: WHO Regional Office for Europe, 2007. - 41 p.

7. Maternal mental health and child health and development in resource-constrained settings: report of a UNFPA/WHO international expert meeting: the interface between reproductive health and mental health, Hanoi, June 21-23, 2007. - Geneva: WHO, Dept., of Reproductive Health and Research, 2009. - 16 p.

8. Friedli, L. Mental health, resilience and inequalities / L. Friedli. - Copenhagen: WHO, Regional Office for Europe. - 2009. - 55 p.

9. William Philip Treheame, J. New concepts of a balanced diet / W. Philip T. James // World health. -1991. - July-Aug. - p. 5-7.

10. Safety evaluation of certain food additives: Seventy-first meeting of the Joint FAO/WHO Expert Committee on Food Additives. Meeting (71st: 2009: Geneva, Switzerland) - Geneva: WHO, 2010. - 80 p.

11. WHO Report on the Global Tobacco Epidemic, 2009: implementing smoke-free environments. - Geneva: WHO, 2009. - 422 p.

12. McQueen, David V. Global perspectives on health promotion effectiveness / D.V. McQueen, C.M. Jones. - New York, NY: Springer, 2007. - 425

### **Informational resources**

- <http://www.mon.gov.ua> - Official website of the Ministry of Education and Science, Youth and Sports of Ukraine.

- <http://zakon2.rada.gov.ua/laws/show/3808-12> Закон Ukraine "About Physical Culture and Sports".

- <http://zakon4.rada.gov.ua/laws/show/1060-12> -Law of Ukraine "On Education".

- <http://www.nbuv.gov.ua/> - The V.I. Vernadsky National Library of Ukraine. Vernadsky.

- <http://library.gov.ua/> - National Scientific Medical Library of Ukraine.

- <http://osvita.ua/vnz/> - Higher education in Ukraine.

- <http://metodportal.com/taxonomy/term/35> - Methodological portal "Physical education".

- <http://www.breath.ru/v.asp?articleid=937> калькулятор calories online

- [www.universalinternetlibrary.ru/book/medzina3/0.shtml](http://www.universalinternetlibrary.ru/book/medzina3/0.shtml)

- <http://journals.hnpu.edu.ua/index.php/biology>

- <https://pidruchniki.com/158407208058/meditsina/valeologiya>

### **EVALUATION CRITERIA**

**Assessment of current learning activities.** The assimilation of each topic is controlled by practical exercises. The student's success is assessed according to the traditional scale of grades "5", "4", "3", "2".

**In a practical lesson,** the assessment of the success of the study of each topic is carried out according to the traditional 4-point scale (2,3,4,5).

- **"excellent"** is given to a student who systematically worked during the semester, showed versatile and deep knowledge of the program material, is able to successfully complete the tasks provided for by the program, has mastered the content of the main and additional literature, realized the relationship of individual sections of the discipline, their importance for the future profession, discovered creativity in understanding and using educational and program material, showed the ability to independently update and replenish knowledge; level of competence - high (creative)

- **"good"** is given to a student who has discovered a complete knowledge of educational and program material, successfully fulfills the tasks provided for by the program, has mastered the basic

literature recommended by the program, has shown a sufficient level of knowledge in the discipline and is capable of independently updating and updating them in the course of further education and professional activity; level of competence - sufficient (constructive and variable)

- **"satisfactory"** is given to a student who has discovered knowledge of the basic educational and program material in the amount necessary for further study and subsequent work in the profession, copes with the tasks provided for in the program, made some mistakes in the answers on the exam and when performing exam tasks, but possesses the necessary knowledge to overcome the mistakes made under the guidance of a scientific and pedagogical worker; competence level - average (reproductive)

- **"unsatisfactory"** is given to a student who did not reveal sufficient knowledge of the main educational and program material, made fundamental mistakes in performing the tasks provided for in the program, cannot use knowledge in further training without the help of a teacher, could not master the skills of independent work; the level of competence is low (receptive-productive).

#### **Individual assignment assessment**

The completion of an individual assignment is credited to a student only after his successful defense in a practical lesson. Depending on the quality of performance and defense for an individual task, a student can receive traditional marks "5", "4" and "3".

The number of points for individual student work does not exceed 4 points. Points for individual work are added to the total points for the student's current academic activity. Points for individual work can be received by students who wrote and reported abstracts from the recommended topics using additional literature and won prizes for participating in the Olympiad in the discipline among students of their university and higher educational institutions in Ukraine

**The final control of the mastery of the discipline in the form of credits is assessed on a two-point scale:**

- **"passed"** is given to a student who has completed the curriculum of the discipline, has no academic debt;

level of competence - high (creative)

- **"not passed"** is given to a student who has not completed the curriculum of the discipline, has academic debt (average score below 3.0 and / or missing classes), the level of competence is low (receptive-productive).

#### **Assessment of academic progress**

Assessment of student progress in the discipline is a rating and exhibited on a multi-point scale as the sum of points for the current control of knowledge and has a definition of the system of UST and the scale adopted in Ukraine.

<b>The total amount of points in the discipline for all types of learning activities</b>	<b>National Scale Score</b>
From 170 to 200 points	Excellent (A) (excellent performance with only a small number of errors)
From 155 до 169 points	Very good (B) (above average with several errors)
From 140 до 154 points	Good (C) (generally correct execution with a certain number of significant errors)
125-139	Satisfactory (D) (not bad, but with a significant number of shortcomings)
<b>111 (min) - 124</b>	Enough (E) (performance meets minimum criteria)
60-110	Unsatisfactory (FX) (reusable)
1-59	Unsatisfactory (F) (with compulsory re-examination of the discipline)

#### **Credit**

Credit is awarded to students who have fully attended classroom training sessions in the discipline, provided by the curriculum and when assessing each control test, received marks on the traditional 4-point scale (2,3,4,5) and have completed all types of work provided by the curriculum.

Students who have a score on the traditional 4-point scale (2) and have not completed all types of work required by the curriculum do not receive credit. Students who have not completed all types of work provided by the curriculum for a valid reason are made adjustments to the individual curriculum and allowed to work off the academic debt by a certain deadline. At the end of the study of the discipline current progress is calculated as the average score of all scores received by the student on a traditional scale, rounded to two (2) decimal places after the decimal point.

### **Converting a traditional discipline grade to a multi-point scale**

Of special methodological importance is the question of converting the result of the student's study of the discipline on a 200-point scale and further ranking on a rating scale (ECTS). It is necessary for implementation of academic mobility of students, providing a student with an opportunity to continue training in this discipline, at another university or in another country. The resulting average score for the discipline allows for conversion to a grade on a 200-point scale.

### **Example:**

<b>Average score for the discipline</b>	<b>Score on a 200-point scale</b>
5,0	200
4,38	X

$$X = (4,38 \times 200) : 5 = 175 \text{ points}$$

## **COURSE POLICY**

### **Deadline and recompilation policy**

Deadline and retake policy

All missed classes must be completed. A student who has missing practical classes must handle them independently (without receiving points!).

The student prepares answers to questions on the topic of the missed lesson, which are indicated in the methodological developments of the department. During independent work, the student must prepare the topics of the classes provided for by the methodological developments of the department.

Some, the most difficult and incomprehensible for the student questions can be asked to the teacher at the beginning of the missed lesson.

### **Academic Virtue Policy**

Compulsory observance of academic virtue by students, namely:

- independent performance of all works, tasks, forms of control provided for by the work program of the discipline "Valeology";
- links to sources of information when using ideas, developments, statements, information;
- observance of the rights of legislation on copyright and related rights;
- provision of reliable information about the results of their own educational (scientific, creative) activities, used research methods and sources of information.

### **Attendance and Lateness Policy**

Attendance in all types of classes is mandatory. Tardiness for all types of classes is prohibited.

### **Mobile devices**

During all types of classroom activities (lectures, practical classes), as well as control activities (final practical classes, exams), the use of micro headphones, phones, smartphones, tablets is prohibited.

During distance learning in conditions of special epidemic regime (adaptive quarantine), Zoom and / or Microsoft Teams platforms are used.

### **Behavior in the classroom**

Behavior in the classroom during all types of training sessions (Lectures, practical sessions) must be appropriate for a medical student.

Teachers and students should be in medical gowns and caps, during full-time classes in conditions of special epidemic regime (Adaptive Quarantine) - in properly dressed protective medical masks or respirators.