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| --- | --- | --- |
| National technical university of Ukraine 'Kyiv Politechnic Institute named after Ihor Sikorskiy |  | **Department of Health and Sports Technologies** |
| **Fundamentals of a healthy lifestyle****Work programme of the academic discipline (Silabus)** |

# Details of the discipline

|  |  |
| --- | --- |
| Level of higher education  | First (bachelor's) |
| Field of knowledge  | *All* |
| Speciality  |  *All* |
| Educational programme |  *All* |
| Status of the discipline | *Normative* |
| Form of study | *full-time* |
| Year of study, semester  | *1st year (first and second semesters)* |
| Scope of the discipline | *3 ECTS credits**classroom classes 60 hours: lectures - 16 hours, practical classes - 44 hours,**independent work - 30 hours* |
| Semester control / control measures | *Credit, module test* |
| Class timetable  | *According to the schedule* *https://schedule.kpi.ua/* |
| Language of instruction | *Ukrainian language* |
| Course leader/lecturers | [*http://ktos-fbmi.kpi.ua/article/spivrobitnyky*](http://ktos-fbmi.kpi.ua/article/spivrobitnyky) |

# Programme of the discipline

# 1. Description of the discipline, its purpose, subject of study and learning outcomes

# The main purpose of the discipline ‘Fundamentals of a healthy lifestyle’ is to form higher education students' motivation to lead a healthy lifestyle and the ability to use various types and forms of physical activity for active recreation and healthy lifestyle.

# After mastering the discipline, higher education students must demonstrate the following programme learning outcomes:

# -use the principles of rational nutrition and physical activity programmes of various directions;

# - apply the components of a healthy lifestyle in order to achieve personal and professional goals;

#  -exercise control and self-control over the state of the human body;

# - use the means of physical activity to improve physical and mental performance, develop physical qualities.

**2. Prerequisites and post-requisites of the discipline (place in the structural and logical scheme of study for the relevant educational programme)**

The discipline ‘Fundamentals of a Healthy Lifestyle’ belongs to the cycle of general training disciplines, it is a mandatory component of the Educational Programme.

**3. Content of the discipline**

**The course material consists of two sections:**

**Section 1. Formation of motivation for a healthy lifestyle.**

**Topic 1.1. General principles of health.**

**Topic 1.2. Health and age periods of human life.**

**Topic 1.3. Nutrition and health.**

**Section 2. Formation of skills and abilities of a healthy lifestyle by means and methods of physical activity.**

**Topic 2.1. Motor activity of persons of different age, sex.**

**Topic 2.2 Individual programmes of physical activity**.

# Educational materials and resources

**Basic educational literature:**

**Books :**

1.Jessica Alsup The Basics of Health, Wellness, and Fitness Publisher: ROTEL, 2024**.** URL.

<https://open.umn.edu/opentextbooks/textbooks/1719>

# Larry Lewis The Beginner's Guide to a Healthy Lifestyle. URL. <https://www.free-ebooks.net/health/The-Beginner-s-Guide-to-a-Healthy-Lifestyle>

3**.** Health in all policies: training manual. World Health Organization 2015. URL.[**https://iris.who.int/bitstream/handle/10665/151788/9789241507981\_eng.pdf**](https://iris.who.int/bitstream/handle/10665/151788/9789241507981_eng.pdf)

4Self care for health: a handbook for community health workers & volunteers. World Health Organization 2013. URL. <https://iris.who.int/bitstream/handle/10665/205887/B5084.pdf>

5 Marshall L, Finch D, Cairncross L, Bibby J. The nation’s healthas an asset: Building the evidence on the social and economic value of health. Health Foundation; 2018. Available from: [www.health.org.uk/publications/the-nations-health-as-anasset](http://www.health.org.uk/publications/the-nations-health-as-anasset)

6 Rayhan, Abu. (2023). THE POWER OF 100: Transforming Your Life with Healthy Habits. URL. [**https://www.researchgate.net/publication/373398061\_THE\_POWER\_OF\_100\_Transforming\_Your\_Life\_with\_Healthy\_Habits**](https://www.researchgate.net/publication/373398061_THE_POWER_OF_100_Transforming_Your_Life_with_Healthy_Habits)

7.Healthy-Habits-Workbook.URL**.** [**https://walterreed.tricare.mil/Portals/126/Documents/Healthy-Habits-Workbook\_v1.pdf?ver=sMHc2oqS8OJF7LF2Av5RfQ%3D%3D**](https://walterreed.tricare.mil/Portals/126/Documents/Healthy-Habits-Workbook_v1.pdf?ver=sMHc2oqS8OJF7LF2Av5RfQ%3D%3D)

8. A Training Manual for Health Workers on Healthy Lifestyle: An Approach for the Prevention and Control of Noncommunicable Diseases 2009 Revised Edition. URL.[**https://healthworkerpreparedness.wordpress.com/wp-content/uploads/2015/05/trainersguide.pdf**](https://healthworkerpreparedness.wordpress.com/wp-content/uploads/2015/05/trainersguide.pdf)

9. Ngxingo, N. and Kerr, M. 2014. Teaching Healthy Living. Fundisa for Change Programme. Environmental Learning Research Centre, Rhodes University, Grahamstown. URL. [**https://fundisaforchange.co.za/wp-content/uploads/2022/11/Healthy-Living-Life-Skills-GR-3.pdf**](https://fundisaforchange.co.za/wp-content/uploads/2022/11/Healthy-Living-Life-Skills-GR-3.pdf)

**Additional Literature:**

1. Jakse, Bostjan & Fidler Mis, Nataša & Fras, Zlatko & Tanous, Derrick & Wirnitzer, Katharina. (2025). Effects of Vegan Diets and Lifestyle on Adult Body Composition: A Narrative Review. Food & Function. URL. <https://www.researchgate.net/publication/393099185_Effects_of_Vegan_Diets_and_Lifestyle_on_Adult_Body_Composition_A_Narrative_Review>

2. Varsak, Suleyman & Yıldız, Abdurrahim & Cebeci, Beyza & Arslaner, Rumeysa. (2025).The Effects Of Group Exercises For The Physical And Psychological Development Of Geriatric Individuals. URL. <https://www.researchgate.net/publication/391977008_The_Effects_Of_Group_Exercises_For_The_Physical_And_Psychological_Development_Of_Geriatric_Individuals>

3. Mehmet Akarsu , İsmail İlbak , Zeliha Çavuşoğlu, Ratko Pavlović , Ana Maria Vulpe ,

Adina Camelia Șlicaru ,Nicolae Lucian Voinea and Cristina Ioana Alexe The Relationship Between a Sustainable Healthy Lifestyle and Depression, Stress, and Anxiety: A Structural Model on the Mediating Role of Physical Literacy. URL. <https://www.researchgate.net/publication/392206334_The_Relationship_Between_a_Sustainable_Healthy_Lifestyle_and_Depression_Stress_and_Anxiety_A_Structural_Model_on_the_Mediating_Role_of_Physical_Literacy/link/6839331b6b5a287c30482db9/download?_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIiwicGFnZSI6InB1YmxpY2F0aW9uIiwicHJldmlvdXNQYWdlIjoiX2RpcmVjdCJ9fQ>

4. Meg Maree Kelly, Kelly Marriott-Statham, Kathleen Clapham, Christine Metusela, Maria Mackay Understanding the cultural determinants of health: A scoping review. First Nations Health and Wellbeing - The Lowitja Journal,Volume 2,2024. URL. <https://www.sciencedirect.com/science/article/pii/S2949840624000275>

5. David Lippman, MD; Mariah Stump, MD, MPH; Erica Veazey, MD; Sley Tanigawa Guimarães, MD; Richard Rosenfeld, MD, MPH, MBA;John H. Kelly, MD, MPH; Dean Ornish, MD; and David L. Katz, MD, MPH Foundations of Lifestyle Medicine and its Evolution. URL. https://www.mcpiqojournal.org/action/showPdf?pii=S2542-4548%2823%2900075-9

6. Paul Campbel Does Exercise Reduce Depressive Symptoms? Commentary Review on Efficacy, Mechanisms and Implementation Anxiety And Depression Journal, 2020. URL. <https://www.academia.edu/85507868/Does_exercise_reduce_depressive_symptoms_Commentary_review_on_efficacy_mechanisms_and_implementation>

7. Madhukar H. Trivedi, MD; Tracy L. Greer, PhD; Timothy S. Church, MD, PhD, MPH;

Thomas J. Carmody, PhD; Bruce D. Grannemann, MA; Daniel I. Galper, PhD;Andrea L. Dunn, PhD; Conrad P. Earnest, PhD; Prabha Sunderajan, MD , Steven S. Henley, MS; and Steven N. Blair, PE Exercise as an Augmentation Treatment for Nonremitted Major Depressive Disorder: A Randomized, Parallel Dose Comparison. URL. <https://www.academia.edu/55982069/Exercise_as_an_augmentation_treatment_for_nonremitted_major_depressive_disorder_a_randomized_parallel_dose_comparison>

8. Cosh, S. M., McNeil, D. G., & Tully, P. J. (2024). Screening for compulsive exercise: development of cutoff scores to identify individuals at risk. Academia Mental Health and Well-Being, 1(3). <https://doi.org/10.20935/MHealthWellB7364>

# Educational content

# Methods of mastering the discipline (educational component)

**Chapter 1. Theoretical and methodological foundations of motivation for a healthy lifestyle.**

**Topic 1.1.** General principles of health

**Lecture 1.** Health as a state task and personal need of a person.

History of human cognition of the essence of health from ancient times to the present. Concepts of health and healthy lifestyle. State approaches to the formation, strengthening and preservation of human health in the world. Human health - global problems of our time. Deviant behaviour (alcohol, drug use, tobacco and e-cigarette smoking, substance abuse, etc.) and its prevention.

**Practical session 1.** The main components of health. Essential elements of human health, spiritual well-being and harmonious development: mental, physical, social. Natural factors of health. The relationship between pathology and health, normology. Mechanisms of health research.

Conducting an express survey.

**Practical training № 2.** The essence of a healthy lifestyle and conditions for its formation. The role of motivations and attitudes in the formation of the foundations of a healthy life of a modern person. Components of a modern person's healthy lifestyle: way, level, quality, lifestyle, etc.

Conducting an express survey.

**Practical session 3.** Genetic aspects of health. Biorhythms and health. Mental and physical performance of a person. Fatigue, its essence and diagnosis. Overwork, measures to prevent it. The daily routine.

Conducting an express survey

**Topic 1.2.** Health and age periods of human life

**Lecture 2.** Age-related changes in personal potential.

Determining the biological age of a person. Theories of human ageing. The concept of "psychosomatic state of a person". Psychosomatic disorders, their characteristics. Means of regulating the psychosomatic state. Mental health.

**Practical session № 4**. Biomarkers of ageing and means of influencing them. Theories of ageing.

Conducting an express survey

**Practical session № 5.** Completion of the module test

**Practical session № 6.** Health and environmental factors. Health properties of colour, sound, smell, etc. Fundamentals of herbal medicine. Psycho-emotional and mental means of regulation and self-regulation of the psychosomatic state of a person. Theory of colour perception by M. Luscher. Types of temperament.

Conducting an express survey

**Practical training № 7.** Stress, its concept. Stress factors. Stress resistance in different periods of life, prevention of disorders. Emotional discomfort as a factor in psychosomatic disorders. Prevention of psychosomatic disorders. Persons from risk groups.

Conducting an express survey.

**Topic 1.3:** Nutrition and health

**Lecture 3**: Influence of qualitative and quantitative parameters of nutrition on human health.

Nutrition and health. Modern theories of nutrition. Characteristics of the main food groups. Balanced rational nutrition regime: norm, frequency, daily distribution of substance consumption, their caloric content.

**Practical lesson №8.** Modern problems of nutrition. Harmful effects of modern nutrition. The impact of food additives on human health. Formation of human food motivation.

Conducting an express survey.

**Practical training №9.** Modern theories of nutrition. Components of food and their importance for the body. The role of water in the life support of the body.

Conducting a quick survey

**Practical training №10.** Determination of body weight components and methods of its correction. Features of nutrition in representatives of different somatotypes. Features of medical, fitness and sports nutrition.

Conducting a quick survey.

**Lecture 4.** Environmental aspects of nutrition

Factors of man-made impact on the environment. Environmental pollution in the context of hostilities and the main methods of environmental protection. Soil and microorganisms. Food purification technologies.

**Practical training session № 11.** Problems of hidden starvation: the impact of vitamin and mineral deficiency on health. Effect of nutrition on microbiota. Influence of diet on metabolic processes in the body. The pyramid of healthy eating. Features of nutrition in the presence of psychosomatic disorders. Antidepressant products.

Conducting an express survey.

**Section 2.** Formation of skills and abilities of a healthy lifestyle by means and methods of physical activity.

**Topic.2.1.** Physical activity of people of different ages, gender

**Lecture 5.** Physical activity as a biological need of the body

The essence of physical activity. Influence of physical activity on the human body. Human musculoskeletal system, features of its formation and importance for human health.

**Practical lesson № 12.** Physical activity and its impact on the human body. Hypodynamia and hypokinesia and their impact on the human body. Norms of physical activity. Influence of motor activity on the state of the musculoskeletal system.

Conducting an express survey.

**Practical session № 13.** Physical exercises as a means of non-specific prevention of functional disorders and diseases. Types of physical exercises. Principles of physical activity.

Conducting an express survey.

**Practical training № 14.** Age dynamics of human performance decline. Factors of decline in human performance. Manifestation of physical qualities in different age periods.

Conducting a quick survey

**Lecture 6.** Health improvement systems.

Health improvement systems at the present stage of development of physical culture. Health systems and their components. Classification of the main natural health systems. Scientifically grounded, folk and traditional health systems.

**Practical lesson № 15.** Breathing systems of health improvement: breathing by K. Buteyko; breathing by O. Strelnikova; breathing techniques in yoga and martial arts. Bodyflex system.

Conducting an express survey.

**Practical lesson № 16. Health nutrition systems: features of dietary nutrition. M. Montignac's nutrition system. Veganism and vegetarianism. Intermittent fasting system.**

**Conducting an express survey.**

**Practical lesson № 17.** Systems of balneological influence on the body: O. Zalmanov's system; S. Kneipp's system; Wimm Hof's system, types of hardening.

Conducting an express survey.

**Practical lesson № 18.** Systems of physical development: Katsuzo Nishi's health system. Systems of recreational walking and running. The system of J. Pilates. The system of Moshe Feldenkrais. T. Hanna's somatics. Water aerobics.

Conducting an express survey.

**Topic 2.2**: Individual programmes of physical activity.

**Lecture 7.** Rationale and application of motor activity programmes of different directions. Purpose and tasks of training programmes of health and sports orientation. Principles of health-improving training. Taking into account individual characteristics of a person during the preparation of training programmes of health-improving orientation. Directions of training programmes.

**Practical lesson № 19.** Characteristics of loads used in training programmes. Structure of a training session. Features of application of physical loads of different orientation. Control and self-control over the state of the body.

Conducting an express survey.

**Lecture 8.** Methods of mastering motor activity programmes of different directions. Methods of development of physical qualities of a person. Methods of restoring physical performance.

**Practical lesson № 20.** Methods of endurance and speed abilities development.

Conducting an express survey

**Practical lesson № 21.** Methods of strength training.

Conducting a quick survey

**Practical session № 22.** Methods of flexibility development. Methods of developing coordination and agility.

Conducting an express survey.

**6. Independent work of the student**

|  |  |  |
| --- | --- | --- |
| №  | Name of the type of SRS | Number of hours of SRS |
| 1 | Preparing for classroom lessons | 20 |
| 2 | Preparing to write a module test | 4 |
| 3 | Preparing for the credit. | 6 |
|  | **Total hours** | **30** |

# Policy and control

# Policy of the discipline (educational component)

A system of requirements for higher education students:

Rules of conduct in the classroom: compliance with safety requirements.

Rules for the protection of individual tasks: compliance with the principle of academic integrity.

Rules for awarding incentive points: incentive points are awarded for completing analytical work on a topic agreed with the teacher up to 10 points.

- Deadlines and retakes policy: classes missed without valid reasons are made up within the allotted time frame at the end of the semester. Higher education students have the opportunity to take two retakes in the presence of the commission.

- Policy on academic integrity: the policy, principles of academic integrity and norms of ethical behaviour of higher education students and research and teaching staff of the University are defined in the Code of Honour of Igor Sikorsky Kyiv Polytechnic Institute (see: https//kpi.ua/code).

**8. Types of control and rating system for assessing learning outcomes (RSO)**

**The rating of a higher education student in a discipline consists of the points he or she receives for:**

* **answers in practical classes;**
* **performance of module control work.**

**Semester control is a test (held in the second semester).**

***First semester***

*Express survey holds in practical classes*

*In practical classes 1-4, 6-7, answers to the survey are assessed at 3 points.*

*Providing a complete and reasoned, logically presented answer, expressing your own position on the issues under discussion, appropriate additions to the answers of other students in the discussion during the express survey - 3 points.*

*Providing correct answers with minor inaccuracies, violations of the logic of the answer during the express survey - 2.5 points.*

*Providing answers with many significant errors during the express survey - 1.5 points.*

*Complete lack of understanding of the question or no answer - 0 points.*

*The maximum number of points for answers in practical classes is 18 points*

*1. .Module control work (MCW)*

*The MCW is conducted at the 5th practical lesson as a test containing 37 test questions on the lecture course, which are demonstrated in random order (MCW duration - 90 minutes).*

*The weighting score for each correct answer is 1 point.*

*The maximum score for the CMC is 37 points*

*The maximum score for the first semester is 55 points.*

Calendar control (CC) is carried out twice a semester as a monitoring of the current state of fulfilment of the requirements of the silent study programme. A higher education student receives a positive result in the CC if his or her current rating score is at least 50% of the maximum possible at the time of the CC.

***Second semester***

***1. Express survey in practical classes***

*In practical classes 8-22 - answers to the survey are assessed at 3 points.*

*Providing a complete and reasoned, logically presented answer, expressing your own position on the issues under discussion, appropriate additions to the answers of other students in the discussion during the express survey - 3 points.*

*Providing correct answers with minor inaccuracies, violations of the logic of the answer during the express survey - 2.5 points.*

*Providing answers with many significant errors during the express survey - 1.5 points.*

*Complete lack of understanding of the question or no answer - 0 points.*

*The maximum number of points for answers in practical classes is 45 points.*

*Calendar control (CC) is conducted twice a semester as a monitoring of the current state of fulfilment of the requirements of the silhouette. A higher education student receives a positive result in the CC if his or her current rating score is at least 50% of the maximum possible at the time of the CC.*

*The final assessment of a higher education student's mastery of the educational component is determined by the results of his/her work for each semester with the conversion of his/her rating points in accordance with the university grading scale (Table 1).*

***The final student rating cannot exceed 100 points!***

*Semester control is a credit.*

***Conditions for admission to the semester control: the semester rating must be more than 30 points.***

*If, based on the results of work in semesters 1-2, a higher education student scores less than 60 points or wants to improve his/her rating score, then during the testing week in semester 2 (week 16) he/she is given the opportunity to complete a test (test), and his/her previous result is cancelled.*

*The duration of the CQA is 90 minutes. The test contains 75 test questions, which are presented in random order. Each correct answer is worth 1-2 points (depending on the complexity of the question). The task of the higher education applicant is to read the questions and answer options carefully and select the correct answer option(s).*

*The maximum score for the EQA is 100 points.*

*The points received by the higher education applicant for the test are transferred in accordance with the university grading scale:*

Table 1: Correspondence of rating points to grades, according to the university grading scale

|  |  |
| --- | --- |
| **Rating points of a higher education applicant** | **Grade, according to the university scale** |
| 95 – 100 | Excellent |
| 85 – 94 | Very good |
| 75 – 84 | Good |
| 65 – 74 | Satisfactory |
| 60 – 64 | Sufficient |
| < 60 | Unsatisfactory |
| Conditions for admission to the credit are not met < 30 | Not permitted |

**9. Additional information on the discipline (educational component)**

During the course of the discipline, the use of modern technologies in the educational process is provided.

**Work programme of the discipline (Silabus):**

**Compiled by:**

**Head of the Department of Health and Sports Technologies, Candidate of Pedagogical Sciences,** Associate Professor, Boyko Hanna Leonidivna

Candidate of Pedagogical Sciences, Associate Professor of the Department of Health and Sports Technologies, Novitskyi Yurii Volodymyrovych

Senior Lecturer of the Department of Health and Sports Technologies, Anikeienko Larysa Vasylivna

Senior Lecturer of the Department of Health and Sports Technologies, Obeziuk Tetiana Kostiantynivna

Senior Lecturer of the Department of Health and Sports Technologies, Soga Serhii Mykhailovych

**Approved** by the Department of Health Improvement and Sports Technologies (**Minutes No. 12 of 22.05.2025)**

**Approved** by the Methodological Council of the University **(Minutes No. 8 of 29.05.2025)**