

# Cyclic kinds of sports (swimming)

## Working program of the discipline (Syllabus)

### Details of the discipline

The level of higher education	<i>The First(Bachelor degree)</i>
Branch of knowledge	<i>All</i>
Specialty	<i>All</i>
Educational program	<i>All</i>
Discipline status	<i>Selective</i>
Form of studying	<i>Full – time (daily)</i>
Year of preparation, semester	<i>2 – nd year, autumn/ spring semester</i>
The scope of the discipline	<i>2 credits (60 hours) classroom classes: lectures - 0 hours, practical - 36 hours, self- studying -24 hours</i>
Semester control / control measures	<i>Credit, modular test, calendar control</i>
Lessons schedule	<i>2 hours per week</i>
Language of instruction	<i>Ukrainian</i>
Information about the course leader / teachers	<i>fv.fbmi.kpi.ua</i>
Course placement	<u><a href="https://do.ipk.kpi.ua/course/view.php?id=1915">Swimming educational department</a></u> <u><a href="https://do.ipk.kpi.ua/course/view.php?id=1915">https://do.ipk.kpi.ua/course/view.php?id=1915</a></u>

### Curriculum of the discipline

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

The main purpose of the discipline "Cyclic kinds of sport (swimming)" is the formation of students' ability to maintain a sufficient level of physical health, physical and mental capacity; to develop the basic vital professional-applied motor skills; to form motivation to engage in physical activity and sports as a component of a healthy lifestyle;

The discipline "Cyclic kinds of sport (swimming)" is interdisciplinary. It integrates, according to its subject, knowledge of medical-biological, psychological-pedagogical and other sciences, which contribute to the level of physical development, functional improvement of body systems, acquisition of basic vital motor skills, skills for further professional activity. As a result of studying the discipline "Cyclic sports (swimming)" students will be able to:

- 1) use the means of table tennis to improve physical and mental performance, development of physical qualities, recovery and health;
- 2) to exercise control and self-control over the functional state of the organism;
- 3) to ensure the preservation and strengthening of individual health in order to maintain an appropriate level of physical condition.

## The content of the discipline

- Topic 1. Information support for swimming classes.
- Topic 2. Methods of determining the individual physical condition. Analysis and assessment of the level of individual physical fitness.
- Topic 3. Improving physical fitness by means of swimming
- Topic 4. Improving the technique of performing swimming exercises.
- Topic 5. Monitoring and assessing the level own physical fitness.
- Topic 6. Improving physical qualities by means of swimming.
- Topic 7. Testing the level of physical fitness

### 4. Educational materials and resources

#### Basic educational literature:

##### Educational manuals:

1. The use of elements of underwater swimming to accelerate the process of learning to swim [Electronic resource]: methodical recommendations for practical classes for students of the educational department of swimming / KPI. Igor Sikorsky; compiled by: N.A. Dakal, V.M. Nazaruk, V.M. Parakhonko, O.V. Antonyuk. - Electronic text data (1 file: 86.89 KB). - Kyiv: KPI named after Igor Sikorsky, 2017. - 24 p. - Name from the screen.

URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/21005>

1. Optimization of the process of teaching swimming by means of aquafitness [Electronic resource]: methodical recommendations for practical classes for students of the educational department of swimming / KPI. Igor Sikorsky; compiled by: N.A. Dakal, O.G. Cherevichko, O.Y. Kalischuk. - Electronic text data (1 file: 114.29 KB). - Kyiv: KPI named after Igor Sikorsky, 2017. - 26 p. - Name from the screen.

URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/21002>

1. Initial swimming training [Electronic resource]: methodical recommendations for practical classes for students who do not know how to swim / NTUU "KPI"; structure. N.A. Dakal, K.M. Smirnov, E.M. Shcheglov. - Electronic text data (1 file: 5.72 KB). - Kyiv: NTUU "KPI", 2012. - Title from the screen. Description: The full text of the document is available only in the local network of the university  
URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/1787> 2. Methodical recommendations for practical classes for students who can not swim "Psychological training in swimming" for teachers, students and instructors [Electronic resource] / NTUU "KPI"; structure. VM Nazaruk, OG Cherevichko. - Electronic text data (1 file: 149 KB). - Kyiv: NTUU "KPI", 2012. - Name from the screen.

Description: The full text of the document is available only in the local network of the university

URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/1785>

1. Physical Education. Formation of special abilities and skills in the process of learning to swim [Electronic resource]: methodical recommendations for studying the discipline for students of the educational department of swimming / NTUU "KPI"; compiled by: I. Yu. Khimich, O. Yu. Kachalov, O.G. Cherevichko. - Electronic text data (1 file: 1.4 MB). - Kyiv: NTUU "KPI", 2012. - 69 p. - Name from the screen. URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/31969>

2. Dakal NA, Vykhyayev Yu. M., Novitsky Yu. V. Methodical recommendations for studying the training course in swimming. NTUU "KPI". 2000.

3. Dakal NA, Smirnov KM, Shcheglov E.M. Initial training in swimming. Methodical recommendations / NA Dakal et al. - Kyiv: NTUU "KPI", 2012. - 56 pp.

4. Increasing the level of flexibility. Methodical recommendations on the discipline "Physical Education" for students of the educational department of swimming / Compiled by: I. Yu. Khimich, O. Yu. Kachalov. - Kyiv: NTUU "KPI", 2012. - 48 pp.

5. Increasing the level of strength development. Method. rekom. to the self. classes of students of the educational department of swimming / Compiled by: K.M. Smirnov, E.M. Shcheglov. K.: NTUU "KPI", 2012. - 24 p.

**Additional literature:**

1. Physical education: Course of lectures on discipline for students of all specialties / Uklad. Vykhylyayev Yu M., Davydenko V. Yu., Boyko H. L, Karpyuk I. Yu. - K.: NTUU "KPI", 2007, p. 6 - 13.

2. Physical Education. Athletic gymnastics for beginners (back muscles) [Electronic resource]: methodical recommendations for independent work of students / KPI. Igor Sikorsky; structure. O.F. Tverdokhlib, M.G. Masalkin, Yu. O. Martinov. - Electronic text data (1 file: 2.67 MB). - Kyiv: KPI named after Igor Sikorsky, 2017. - 43 p. - Name from the screen.

URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/20607>

3. Physical Education. Athletic gymnastics for beginners (muscles of the upper extremities) [Electronic resource]: methodical recommendations for independent work of students / KPI. Igor Sikorsky; O.F. Tverdokhlib, A.I. Sobolenko, M.M. Koryukaev. - Electronic text data (1 file: 1.47 MB). - Kyiv: KPI named after Igor Sikorsky, 2017. - 36 p. - Name from the screen.

URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/20606>

4. Physical education [Electronic resource]: methodical recommendations for independent physical education classes for students of the educational department of aerobics of NTUU "KPI". Methodical recommendations for students engaged in aerobics / NTUU "KPI"; structure. N.V Ivanyuta, S.E Tolmachova, N.V. Kuzmenko, N.V. Gradusova [etc.]. - Electronic text data (1 file: 32.4 KB). - Kyiv: NTUU "KPI", 2015. - 137 p. - Name from the screen.

URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/15480>

5. Physical Education. Methodical recommendations for performing a set of exercises with fitball for students of the aerobics department of NTUU "KPI" [Electronic resource] / NTUU "KPI"; structure. N.V. Ivanyuta, S.E Tolmacheva. - Electronic text data (1 file: 906 KB). - Kyiv: NTUU "KPI", 2015. - 42 p. - Name from the screen.

Description: The full text of the document is available only in the local network of the university

URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/11742>

6. Methodical recommendations for performing a set of exercises on the Pilates system [Electronic resource] / NTUU "KPI"; structure. S.E Tolmacheva, N.V Ivanyuta. - Electronic text data (1 file: 17.1 MB). - Kyiv: NTUU "KPI", 2014. - 66 p. - Name from the screen.

Description: The full text of the document is available only in the local network of the university

URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/8148>

7. Basic aerobics in the structure of health fitness [Electronic resource]: methodical recommendations for practical classes in the discipline "Physical Education" for students of all specialties / NTUU "KPI"; structure. N.V Gradusova, N.V Kuzmenko. - Electronic text data (1 file: 187 KB). - Kyiv: NTUU "KPI", 2011. - Name from the screen.

Description: The full text of the document is available only in the local network of the university

URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/1780>

## Educational content

### 1. Methods of mastering the discipline (educational component)

Practical lesson №1. Objectives: 1. To provide theoretical knowledge on the history of the origin and development of swimming.

2. Get acquainted with safety and the basic rules of practical tasks in the swimming department.

Tools: Interactive materials.

Conducting an express survey.

Practical lesson № 2. Tasks: 1. Define individual level of functional state of the cardiovascular system (CCC).

2. To acquaint with features of conducting "Diary of self-control of the student".

3. To get acquainted with the aquatic environment and movements of the rabbit's legs on the chest. »; simulation exercises, exercises for mastering with water; breathing exercises, movements of the legs with a rabbit, games for mastering with water.

Conducting an express survey.

Practical lesson № 3. Tasks: 1. To acquaint with the movements of the hands of a rabbit on the chest.

2. Teach breathing techniques when swimming.

3. Teach rabbit foot movements on the chest and back.

Tools: interactive materials, breathing exercises - exercises at the side, exercises in movement, with different hand positions; movements of the legs of the rabbit on the chest with a board; imitation exercises - sitting on a bench, leg movements with a rabbit; standing - movements of hands with a rabbit; sliding on the back, movements of the legs of the rabbit on the back.

Conducting an express survey.

Practical lesson №4. Tasks: 1. To acquaint with movements of hands by a rabbit on a back.

2. Teach rabbit foot movements in coordination with breathing

3. Promote the development of coordination skills.

Tools: interactive materials, simulation exercises; breathing exercises, exercises for leg and arm movements with a rabbit on the back; exercises that promote the development of coordination skills.

Conducting an express survey.

Practical lesson №5. Tasks: 1. To acquaint with the breathing technique when swimming with a rabbit on his chest.

2. Teach hand movements with a rabbit on the chest.

3. Promote dexterity.

Tools: interactive materials, simulation exercises; breathing exercises, exercises for movements of legs and arms by a rabbit; water games for dexterity development.

Conducting an express survey.

Practical lesson №6. Objectives: 1. To determine the individual level of the functional state of the cardiovascular system (CVS). Teach hand movements with a rabbit on your back.

4. Promote the development of coordination skills.

Tools: interactive materials, tests to assess the individual level of functional status of the cardiovascular system (CCC); simulation exercises; breathing exercises, leg and arm exercises with a rabbit on the chest and a rabbit on the back; exercises that promote the development of coordination skills.

Conducting an express survey.

Practical lesson №7. Tasks: 1. To acquaint with coordination of movements of legs, hands and breath at swimming by a rabbit on a back.

2. To teach coordination of movements of legs, hands and breath at swimming by a rabbit on a breast.

3. To promote development of speed

Means: interactive materials, imitation exercises; breathing exercises, exercises for leg and arm movements with a rabbit on the chest and a rabbit on the back, exercises in coordination of movements with breathing;

Conducting an express survey.

Practical lesson №8. Tasks: 1. To acquaint with the technique of performing turns when swimming with a rabbit on the chest.

2. To teach the technique of swimming with a rabbit on the chest in coordination of movements

3. To teach coordination of movements of legs, arms and breathing back.

4. Promote the development of speed qualities in relays.

Means: interactive materials, simulation exercises; exercises with a rabbit on the chest and a rabbit on the back; turns;

Conducting an express survey.

Practical lesson №9. Tasks: 1. To get acquainted with the technique of performing the start when swimming with a rabbit on the chest.

2. To teach the technique of swimming with a rabbit on the chest and back in coordination of movements and back.

Tools: interactive materials, simulation exercises; exercises with a rabbit on the chest and a rabbit on the back; turns; starting jumps.

Conducting an express survey.

Practical lesson №10. Objectives: 1. To determine the individual level of the functional state of the cardiovascular system (CVS).

2. To acquaint with the technique of leg movements with the breaststroke. materials, tests to assess the individual level of functional status of the cardiovascular system (CCC); simulation exercises: leg movements breaststroke; exercises around the side - movements of the legs with the breaststroke in different starting positions; distance swimming in the chosen way.

Conducting an express survey.

Practical lesson №11. Tasks: 1. To acquaint with the movements of the arms with the breaststroke.

2. To teach the movements of the legs with the breaststroke

3. Promote endurance.

Tools: interactive materials, simulation exercises: hand movements breaststroke; exercises at the side - movements of the legs with a breaststroke in different starting positions; hand movements; distance swimming in the chosen way.

Conducting an express survey.

Practical lesson №12. Tasks: 1. To teach the movements of the legs with the breaststroke

2. To teach the movements of the hands with the breaststroke

3. Promote the development of coordination skills.

Means: interactive materials, simulation exercises: hand movements breaststroke; on the water: leg movements breaststroke in different starting positions; hand movements; exercises that promote the development of coordination skills.

Conducting an express survey.

Practical lesson №13. Tasks: 1. To get acquainted with the technique of turning and starting jump when swimming breaststroke.

2. To teach leg movements breaststroke

3. To teach hand movements breaststroke

3. Contribute to the development of endurance.

Means: interactive materials, simulation exercises, breaststroke exercises - movements of legs and arms; exercises to study the technique of turns and start distances with breaststroke; distance swimming in the chosen way.

Conducting an express survey.

Practical lesson №14. Tasks: 1. To determine the individual level of the functional state of the cardiovascular system (CVS).

2. To acquaint with the movements of the legs and torso butterfly.

3. To teach the technique of breaststroke in the coordination of movements. {{1 }} 3. Contribute to the development of endurance.

Means: interactive materials, tests to assess the individual level of functional status of the cardiovascular system (CVS), simulation exercises, butterfly exercises - leg movements; swimming in coordination of breaststroke movements; turns and starts; distance swimming in the chosen way.

Conducting an express survey.

Practical lesson №15. Tasks: 1. To acquaint with movements of hands in a butterfly.

2. To teach movements of feet in a butterfly.

3. Promote the development of strength.

Means: interactive materials, simulation exercises, butterfly exercises - movements of the legs, torso; hand movements ;; distance swimming in the chosen way., exercises on the water that promote the development of strength.

Conducting an express survey.

Practical lesson №16. Objectives: 1. To promote the manifestation of basic physical qualities.

Means: control standards - jump from a place up, shuttle run 4x9 m from a high start, torso tilt from a sitting position, flexion-extension of the arms in a supine position (women) pull-ups on the crossbar (men). Conducting an express survey

Practical lesson № 17

Performing a modular test

Practical lesson № 18.

Conducting a credit.

## 6. Independent work of the student

Preparation for practical classes, calculations based on primary data obtained during and after functional tests (at the beginning of each month), performance of modular control work (17-th week), keeping a diary of self-control.

## Policy and control

### 7. Discipline policy (educational component)

Class attendance rules: students who are late for classes are not allowed; students are admitted to classes if they have sportswear and sports shoes, and a certificate of their medical group for health reasons.

Rules of conduct in the classroom: turn off the phones, comply 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 participation in competitions, sports and recreation activities according to the plan of the department, faculty, university (5... + 7 points); participation in city, national or international competitions (5... + 7 points), positive dynamics of physical condition in the diary of self-control (5... + 7 points).

*The amount of incentive points may not exceed 10 points.*

policy of deadlines and rescheduling: classes that are missed without good reason, are completed in the allotted time at the end of the semester. Students have the possibility of two reshuffles in the presence of the commission.

- other requirements that do not contradict the legislation of Ukraine and regulations of the University: when taking the test students must follow safety rules.
- policy on academic integrity : policy, principles of academic integrity and norms of ethical behavior of students and employees of the University are defined in the code of honor of KPI named after Igor Sikorsky (see: [https // kpi.ua / code](https://kpi.ua/code)).

### **Types of control and rating system for evaluation of learning outcomes (RSO)**

#### **1. Performing test tasks in practical classes**

In practical classes №1-16 test tasks are evaluated in 1 point.

The maximum number of points for test tasks - 16 points.

#### **2. Modular test**

Conducted on the 17th practical lesson in the form of a test containing 30 test tasks, each correct answer is evaluated in 1 point.

Maximum score - 30 points.

#### **3 . Keeping a Diary of Self-Monitoring**

Keeping a diary is kept monthly.

Maximum score is 4 points.

tests on physical fitness - 50 points.

Jump up from a place (cm);

Men	55	51	48	43	40	≤39
Women	45	42	38	35	30	≤29
Points	10	9	8	7	6	5

Shuttle run 4 x 9 m, (sec)

Men	9,0	9,4	9,8	10,3	10,8	11,0	>11,0
Women	10,4	10,7	11,2	11,6	12,0	12,3	>12,3
Points	10	9	8	7	6	5	0

Strength exercise: men - pull-ups on the crossbar; women - flexion-extension of the arms lying down (times);

Men	10	9	8	7	6	5	<5
Women.	20	15	12	10	8	7	<7
Points	10	9	8	7	6	5	0

Flexibility exercise (cm);

Men	13	11	9	7	5	3	<3
Women	16	14	12	10	8	6	<6
Points	10	9	8	7	6	5	0

According to a separate schedule during the semester: freestyle swimming without taking into account time (m);

Men.	100	75	50	25	<25
Women	100	75	50	25	<25
Points	10	8	6	4	0

Calendar control is carried out during the semester as a monitoring of the current state of compliance with the requirements of the syllabus. A student receives a positive result from the QC when his current rating score is at least 50% of the maximum possible at the time of the QC.

The final assessment of the student's mastery of the educational component is assessed by the result of his work for the semester with the transfer of his rating points to the university assessment scale (Table 1).

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

(Semester control - credit. Week 18), it is given the opportunity to perform an integrated test, and his previous rating is revoked

Table 1

Student Score	University Score	Student rating points	University grade
95 – 100			Excellent
85 – 94			Very Good
75 – 84			Good
65 – 74			Satisfactory
60 – 64			Sufficient
< 60			Unsatisfactory

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

During the passage of educational material on the discipline provides for the use of modern technologies in the educational process. During the academic period, students are expected to use the

means and methods of self-control over the state of health, their compliance with the requirements for the prevention of injuries and diseases, keeping diaries of self-control over the state of the body.

Practical tasks are given to students depending on the current state of functional readiness of their body and the degree of their mastery of the technique of performing sports and physical exercises.

The method of realization of tasks is regulated by safety rules and realization by students of independent control over a condition of the basic functional systems.

The practical classes solve problems to increase the level of development of physical and mental qualities, use analytical approaches to the choice of methods for developing the strength of individual muscles and their groups, as well as methods and means of active recreation and recovery.

During classes, in accordance with the requirements and forms of organization of table tennis lessons, educational equipment and sports facilities are used.

The program material for groups of initial physical training includes:

- physical training, the main purpose of which is to create a base for improving the level of skill with the help of general physical means of training
- technical training, the main purpose of which is to improve individual technique, expand the range of motor skills;

### **Working program of the discipline (syllabus):**

Compiled by: Acting Head of the Department of Physical Education, Ph.D., Associate Professor, Boyko Hanna Leonidivna

Head of the Department of Sports Improvement, Ph.D., Associate Professor, Novitsky Yuriy Volodymyrovych

Approved by the Department of Physical Education \_\_\_\_\_ (Minutes № 3 from 26. 11 2020)

Department of Sports Improvement (Minutes № 2 from 27.11.2020)

Approved by the Methodical Council of the University (Minutes № 5 from 14.01.2021 )