

Power kinds of sport (athletic gymnastics)

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	Athletic Gymnastics Educational Department(1 floor) https://do.ipk.kpi.ua/course/view.php?id=2377 Athletic Gymnastics Educational Department (4 floor) https://do.ipk.kpi.ua/course/view.php?id=2624

Curriculum of the discipline

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

The main purpose of the discipline "Power kinds of sport (athletic gymnastics)" is the formation of students' the 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 "Power kinds of sport (athletic gymnastics)" 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 "Power kinds of sport (athletic gymnastics)" 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 athletic gymnastics 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 athletic gymnastics
- Topic 4. Improving the technique of performing athletic gymnastics exercises.
- Topic 5. Monitoring and assessing the level own physical fitness.
- Topic 6. Improving physical qualities by means of athletic gymnastics.
- Topic 7. Testing the level of physical fitness

2. Educational materials and resources

Basic educational literature:

Educational manuals:

1. Sirotinskaya O.K. Methodical recommendations for students of 1-2 courses engaged in athletic gymnastics / O.K. Sirotinskaya. - Kyiv: NTUU "KPI", 2011. - 42 pp.

2. Sirotynska O.K, Pankratov M.S. Methodical instructions for the implementation of safety requirements and injury prevention of students in classes in athletic gymnastics in higher educational institutions [Electronic resource] / KPI. Igor Sikorsky; compiled by: OK Sirotynskaya, MS Pankratov. - Electronic text data (1 file: 155.5 KB). - Kyiv: KPI named after Igor Sikorsky, 2017. - 24 p. - Name from the screen. URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/20060>

3. Tverdokhlib O.F. Biological bases of athletic gymnastics for beginners [Electronic resource]: methodical recommendations for students of the educational department of athletic gymnastics / KPI. Igor Sikorsky; structure. O.F. Tverdokhlib; resp. ed. H.L. Boyko. - Electronic text data (1 file: 950.91 Kbytes). - Kyiv: KPI named after Igor Sikorsky, 2017. - 30 p. - Name from the screen. URI (Unified Resource Identifier): <https://ela.kpi.ua/handle/123456789/19250>

4. Tverdokhlib O.F. 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>

5. Tverdokhlib O.F. Physical Education. Athletic gymnastics for beginners (muscles of the upper extremities) [Electronic resource]: methodical recommendations for independent work of students / KPI. Igor Sikorsky; OF Tverdokhlib, AI Sobolenko, MM 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>

6. Physical Education. Athletic gymnastics: "Program of target increase of strength of basic muscles" [Electronic resource]: methodical recommendations for practical classes for students of the educational department of athletic gymnastics / NTUU "KPI"; structure. M.G. Masalkin, Yu. O. Martinov. - Electronic text data (1 file: 1.83 MB). - Kyiv: NTUU "KPI", 2010. - 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/123456789/507>

Additional literature:

1. Physical education: Course of lectures on the discipline for students of all specialties / Structure. 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. NV Ivanyuta, SE Tolmacheva, NV Kuzmenko, NV 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. NV Ivanyuta, SE Tolmachev. - 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

3. Methods of mastering the discipline (educational component)

Practical lesson № 1. Tasks: 1. To acquaint with power gymnastic exercises in athletic gymnastics.

2. Get acquainted with safety and basic rules of practical tasks.

Tools: interactive materials. Starting positions when performing exercises, work of fixing muscles. Position of the torso, arms, legs.

Conducting an express survey.

Practical lesson № 2. Tasks: 1. To determine the individual level of functional state of the cardiovascular system (CVS). Get acquainted with the peculiarities of keeping a "Student Self-Control Diary".

2. To acquaint and teach the technique of performing a set of exercises with your own body weight.

3. Familiarize yourself with post-workout muscle stretching exercises.

Tools: Interactive materials. Testing the level of functional state of CCC students. Exercises on bars, benches, crossbars and Swedish ladder. Muscle stretching exercises.

Conducting an express survey.

Practical lesson № 3. Tasks: 1. To acquaint and teach the technique of performing a set of exercises with dumbbells.

2. Promote flexibility.

Tools: interactive materials. Exercises with dumbbells. Exercises on bars, benches, crossbars and Swedish ladder.

Conducting an express survey.

Practical lesson № 4. Tasks: 1. To acquaint and teach the technique of performing the exercise - bench press.

2. Promote the coordination of movements.

Tools: interactive materials. Exercises with dumbbells, barbell, barbell. Exercises on bars, simulators, crossbar and Swedish ladder.

Conducting an express survey. } 2. Promote endurance.

Tools: interactive materials. Exercises with dumbbells, barbell, barbell. Exercises on bars, simulators, crossbar and Swedish ladder.

Conducting an express survey

Practical lesson № 6. Tasks: 1. To determine the individual level of functional state of the cardiovascular system (CVS).

2. To acquaint and teach the technique of performing the exercise - the state of traction.

3. Promote balance.

Tools: interactive materials. Testing the level of functional state of CCC students. Exercises with dumbbells, barbell, barbell. Exercises on bars, simulators, crossbar and Swedish ladder.

Conducting an express survey.

Practical lesson № 7. Tasks: 1. To acquaint and teach the technique of performing exercises to develop the strength of the chest muscles.

2. Contribute to the development of strength endurance.

Tools: interactive materials. Exercises with dumbbells, barbell, barbell. Exercises on bars, simulators, crossbar and Swedish ladder.

Conducting an express survey.

Practical lesson № 8. Tasks: 1. To acquaint and teach the technique of performing exercises for the development of triceps strength.

2. Promote flexibility through stretching.

Tools: interactive materials. Exercises with dumbbells, barbell, barbell. Exercises on bars, exercise machines, crossbar and Swedish ladder.

Conducting an express survey. } 2. Promote the development of explosive power.

Tools: interactive materials. Exercises with dumbbells, barbell, barbell. Exercises on bars, simulators, crossbar and Swedish ladder.

Conducting an express survey

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

2. Introduce and teach the techniques of performing exercises to develop triceps strength.

3. Promote the development of complex coordination skills.

Tools: interactive materials. Testing the level of functional state of CCC students. Exercises with dumbbells, barbell, barbell. Exercises on bars, simulators, crossbar and Swedish ladder.

Conducting an express survey. shoulder girdle.

2. Promote dexterity.

Tools: interactive materials. Exercises with dumbbells, barbell, barbell. Exercises on bars, simulators, crossbar and Swedish ladder.

Conducting an express survey.

Practical lesson № 12. Tasks: 1. To acquaint and teach the technique of performing exercises to develop the strength of the abdominal muscles.

2. Promote the flexibility of the spine.

Tools: interactive materials. Exercises with dumbbells, barbell, barbell. Exercises on bars, benches, simulators, crossbar and Swedish ladder.

Conducting an express survey

Practical lesson № 13. Tasks: 1. To acquaint and teach the techniques of performing exercises to develop the strength of the trapezius and deltoid muscles.

2. Promote the development of speed.

Tools: interactive materials. Exercises with dumbbells, barbell, barbell. Exercises on bars, simulators, crossbar and Swedish ladder.

Conducting an express survey

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

2. Get to know and teach the techniques of performing exercises to develop the strength of the back muscles.

3. Promote general (aerobic) endurance.

Tools: interactive materials. Testing the level of functional state of CCC students. Exercises with dumbbells, barbell, barbell. Exercises on bars, simulators, crossbar and Swedish ladder.

Conducting an express survey

Practical lesson № 15. Tasks: 1. To acquaint and teach the techniques of performing exercises to develop gluteal muscles.

2. Promote the development of mobility in the joints.

Means: interactive materials. Exercises with dumbbells, barbell, barbell. Exercises on bars, benches, simulators, crossbar and Swedish ladder.

Conducting an express survey

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

Means: control standards - jumping up, shuttle run 4x9 m high start, torso tilt from a sitting position, flexion-extension of the arms in a supine position (girls.) pull-ups on the crossbar (pers.).

Conducting an express survey

Practical lesson № 17

Performing a modular test

Practical lesson № 18.

Conducting a credit

4. 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

5. 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

6. 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)