MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE NATIONAL UNIVERISTY "CHERNIHIV POLYTECHNIC"

APPROVED BY

Academic council of Chernihiv Polytechnic National University 31 August 2020, Protocol No. 6

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PROCEDURE

conducting an annual assessment of the physical fitness of students, staff and research and teaching staff
Chernihiv Polytechnic National University

Terms

- 1. The annual assessment of the physical fitness of the population of Ukraine involves the performance of a set of tests (tests) for persons of different sexes and ages to assess the level of physical health of different groups of the population (hereinafter testing).
- 2. Categories of persons (hereinafter participants) for whom testing is mandatory students of I-II courses.
- 3. Other students, staff, research and teaching staff, foreigners and stateless persons who study (work) at the University on a legal basis, are involved in testing on a voluntary basis.

Testing organization

- 1. Heads of institutes and structural subdivisions draw up a collective application for passing the test (hereinafter the application), according to the form given in Annex 1, and submit it to those responsible for the event, in order to form a single list of participants.
- 2. Participants for whom the desire to take the test is voluntary, send the application to the person responsible for the annual assessment of physical fitness of students, staff and research and teaching staff of the University, by e-mail, according to the form in Annex 2.
- 3. The following must be attached to the application for each participant:
- photocopy of passport;
- medical certificate of admission to physical culture and sports.
- 4. Those responsible for conducting the annual assessment of physical fitness of students, staff and research and teaching staff of the University accept personal and collective applications and form a single list of participants, in the form given in Annex 3.
- 5. After admitting the participant to the test, those responsible for conducting the tests register the respondent and determine the number of the participant for further participation.

The participant is not allowed to take the test in the following cases:

- absence of personal data of the participant in the application;
- lack of a medical certificate on admission to physical culture and sports;
- deterioration of his physical condition before or at the time of the types of tests (tests) and standards.

III. Testing

- 1. The testing system for the categories of participants consists of the following types of tests (endurance): endurance, strength, speed, agility, flexibility.
- 2. Types of tests (tests) and standards include:
- 1) types of tests (tests) to determine the level of development of physical qualities and applied motor skills;

- 2) standards that allow to assess the versatility (harmony) of the development of basic physical qualities and applied motor skills and abilities in accordance with gender and age characteristics of human development.
- 3. The appearance of the participants must correspond to this sporting event.

At the place of testing, the University management forms a medical center in order to organize the provision of medical care to test participants.

- 5. Provision of medical care in case of injuries in compliance with the standards is carried out by medical specialists at the site of injury. Emergency medical care is provided to test participants by the emergency (ambulance) team. If necessary, the victim is transported by an emergency (ambulance) team to a medical organization to provide him with specialized medical care. Conditions for performing types of tests
- 1. Endurance (uniform running for 1000 m, 1500 m, 2000 m, 3000 m, min., Sec.).

Endurance running is carried out on the treadmill of the stadium or any flat terrain. The maximum number of participants is 20 people.

For men and women, the test conditions are the same (the only difference is the length of the distance).

At the command "To start" test participants get to the starting line in the high start position.

When everyone is ready to start, on the command "Rush" (or shot), they start running, trying to finish the distance as quickly as possible.

If necessary, you are allowed to go for a walk.

The test result is the time to cover the distance to the nearest second.

Power

Flexion and extension of the arms at rest, lying on the floor:

Bending and unbending the arms while lying on the floor can be performed with or without the use of a "contact platform".

Flexion and extension of the arms in the emphasis lying on the floor is performed from the starting position (hereinafter - VP): emphasis lying on the floor, arms shoulder-width apart, hands forward, elbows apart no more than $45\,^{\circ}$ C, shoulders, torso and legs make a straight line. The feet rest on the floor without support. The participant, bending his arms, touches the floor with his chest or "contact platform" 5 cm high, then, stretching his arms, returns to VP and, having fixed it for $0.5\,$ s, continues performance of test (test).

The number of error-free flexions and extensions of the arms, recorded by the judge's account in VP.

Attempt is not credited in the case of:

- 1) touching the floor with knees, hips, pelvis;
- 2) violation of the straight line "shoulders torso legs";

- 3) lack of fixation for 0.5 s VP;
- 4) alternate extension of the arms;
- 5) no chest touching the floor (platform);
- 6) raising the elbows relative to the torso by more than $45 \,^{\circ}$ C.

Pull-ups on the crossbar:

Pull-ups on the crossbar are performed with VP: height grip from above, hands at shoulder width, arms, torso and legs straightened, legs do not touch the floor, feet together. The participant is pulled up to such a position when his chin is above the crossbar, then descends to the height and, fixing VP for 0.5 s, continues to perform the test (test).

The number of error-free pull-ups recorded by the judge's account in VP is credited.

Attempt does not count if:

- 1) pull-ups with jerks or swings of the legs (torso);
- 2) lack of fixation for 0.5 s VP;
- 3) alternate flexion of the arms.

Each participant is allowed only one approach to the crossbar.

Pull-ups from a height lying on a low crossbar:

Pulling up from a height lying on a low crossbar is performed with VP: height lying face grip from above, palms shoulder-width apart, head, torso and legs form a straight line, heels can rest on the support up to 4 cm.

In order to occupy VP, the participant approaches a crossbeam, undertakes a vulture with a grip from above, squats under a vulture and, holding the head straight, puts a chin on a vulture of a crossbeam. Then, without stretching the arms and without tearing the chin from the fingerboard, stepping forward, straighten so that the head, torso and legs form a straight line. The assistant sports judge places the support at the feet of the participant.

After that, the participant straightens his arms and takes VP. the participant is pulled up to the rise of the chin above the bar of the crossbar, then descends to the height and, fixing for 0.5 s VP, continues to perform the test (test).

An attempt is not credited if:

- 1) pull-ups with jerks or with a sag of the torso;
- 2) the chin did not rise above the bar of the crossbar;
- 3) lack of fixation for 0.5 s VP;
- 4) alternate flexion of the arms.

Lifting the torso for 1 minute:

Lifting the torso from a supine position is performed with VP: lying on his back on a gymnastic mat, hands behind his head, fingers clasped in a "lock", shoulders touching the mat, legs bent at the knees at right angles, feet pressed by the partner to the floor. The participant performs the maximum number of ascents in 1 minute, touching the elbows of the knees, followed by a return to VP.

The number of correctly performed torso lifts is counted.

Для проведення тесту створюються пари, один з партнерів виконує випробування (тест), інший утримує його ноги за ступні і гомілки. Потім учасники міняються місцями.

Спроба не зараховується у разі:

- 1) відсутності торкання ліктями стегон (колін);
- 2) відсутності торкання лопатками мату;
- 3) пальці розімкнуті "із замку";
- 4) зміщення тазу.

Long jump from a place:

The long jump is performed in the appropriate sector for jumps. The place of repulsion should provide good traction with the shoes. The participant takes VP: feet shoulder-width apart, feet parallel, toes in front of the repulsion line. Simultaneous push of two legs is a jump forward. Waving your hands is allowed. The measurement is made perpendicular to the line from the place of repulsion with either foot to the nearest trace left by any part of the participant's body.

The participant is given three attempts. The best result is taken into account. Attempt does not count if:

- 1) interception for the line of repulsion or touching it;
- 2) execution of repulsion from the previous jump;
- 3) kicking in turn.

Weightlifting:

Weights weighing 16 kg are used for testing. The total number of correctly performed weightlifts with the right and left hand is credited. The test is performed on a platform or any platform measuring 2x2 m. The participant performs in a sports uniform, which allows sports judges to determine the straightening of the working arm and extension of the legs in the hip and knee joints.

The weight of the weight is performed in one go, first with one hand, then without a break with the other. The participant continuously lifts the weight up until the arm is fully straightened and fixed. The working arm, legs and torso are straightened. The transition to the exercise with the other hand can be done once. You can use additional swings to change hands. The participant can start the test (test) with either hand and proceed to perform the test (test) with the other hand at any time, rest, holding the weight in the upper or lower position, not more than 5 seconds. During the inspection (test), the judge counts each correctly performed lift after fixing the weight for at least 0.5 s.

The test (test) is terminated in the case of:

- 1) the use of any devices that facilitate the lifting of weights, including gymnastic pads;
- 2) the use of rosin for the preparation of palms;
- 3) self-help, resting his free hand on the thigh or torso;
- 4) placing a weight on the head, shoulder, chest, leg or platform;
- 5) going beyond the platform.

Traffic is not counted if:

- 1) to the weight press;
- 2) touching the legs, torso, dumbbells with the free hand.

Squat:

The squat is performed by descending smoothly, bending the legs at the knees and hips in the following sequence:

- 1) occupy VP. Standing with legs spaced shoulder-width apart, slightly bend them at the knees;
- 2) keep your back straight, fold your arms across your chest;
- 3) squats are performed parallel to the thighs with the floor.

The attempt is not credited in the case of detachment of the foot from the floor.

It is necessary to follow the technique of breathing, inhaling on the lowering and exhaling when moving the body up.

Speed (running 30 m, 60 m, 100 m)

Running is carried out on the tracks of the stadium or on any level ground with a hard surface.

The 30 m run is performed from a high start, the 60 and 100 m runs are performed from a low or high start.

Participants start with 2 - 4 people. The test result is the time to cover the distance to the tenth of a second. Only one attempt is allowed.

Dexterity (shuttle run 4x9 m)

Shuttle running is carried out on any flat platform with a hard surface, which provides good traction with shoes, limited at a distance of 9 m by two parallel lines - "Start" and "Finish". Participants, without stepping on the starting line, take a high start position. On the command "March!" (with the stopwatches switched on at the same time) the participants run to the Finish line, touch it with their hand, return to the Start line, touch it and overcome the last segment without touching the Finish line with their hand. The stopwatch is stopped at the moment of crossing the Finish line. Participants start with 2 people.

The participant's result is determined by the better of the two attempts.

Flexibility (tilts the torso forward from a sitting position)

Leaning forward from a sitting position is performed with VP: sitting on the floor or gymnastic bench, legs straightened at the knees, feet are parallel at a width of 10 - 15 cm. The participant performs in a sports form that allows judges to determine the straightening of the legs at the knees. When performing a test on the floor, the team member performs two previous inclines. At the third inclination touches the floor with the fingers or palms of both hands and holds the touch for 2 seconds.

When performing a test on a gymnastic bench, the team member performs two previous inclines, palms move along the measuring line. At the third inclination the participant inclines as much as possible and keeps touch of a ruler of measurement within 2 with. The amount of flexibility is measured in centimeters. The result above the level of the gymnastic bench is determined by the sign "-", below - by the sign "+".

The test is not credited in the case of:

- 1) bending the legs at the knees;
- 2) holding the result with the fingers of one hand;
- 3) no content of the result for 2 s.

6. For participants aged 21 to 70 years, additional points are credited for the calculation of body mass index (hereinafter - BMI).

BMI allows you to assess the degree of compliance of human body weight and height and thus assess whether the weight is insufficient, normal or overweight.

Body mass index is calculated by the formula:

$$I = m / h2$$

where: m is body weight in kilograms, h is height in meters, and is measured in kg/m2.

For example, human weight = 60 kg, height = 170 cm. Therefore, the body mass index in this case is equal to: BMI = $60 : (1.70 \times 1.70) = 20.7$.

BMI determines an additional indicator of the formation of values to one's own health, improvement of physical development and physical fitness. According to the value of the mass index, the adult population is divided into several categories, data on these categories and the risk of chronic and non-communicable diseases in each of them are given in table. 1:

Table 1

Classification of body weight in adults and the incidence of chronic non-communicable diseases				
		Probability of disease development		
Classification	ВМІ, кг/м 2	Cardiovascular	Bronchopulmonary	Endocrine
Not efficient weigh	Less than 18,5	Law	High	Law
Norm	18,5—24,9	Law	Law	Law
Excess weight	More than 25,0			
Obesity	25,0—29,9	Middle	Law	Law
Obesity 1 degree	30,0—34,9	High	Law	Middle

- V. Results of the annual testing of the assessment of physical fitness of students, staff and research and teaching staff of the University.
- 1. After testing for each type of tests (tests), the judge informs the participants of their results.

- 2. The test results of the participants shall be entered in the information on the types of tests (tests) and testing standards according to the form given in Annex 3.
- 3. The final assessment of the level of physical fitness of participants aged 17 to 20 years is based on the sum of the points obtained by them for performing 5 selected types of tests (tests).

The final assessment of the level of physical fitness of participants aged 21 to 70 years is based on the sum of the points obtained by them for performing 5 selected types of tests (tests) and additional points for the calculation of BMI.

- 5. The final test scores shall be compared with the scale of results of the types of tests (tests) of physical fitness according to the forms given in Annex 4.
- 6. According to the test results, the assessment is set at four levels of physical fitness: high, sufficient, medium, low.
- 7. Upon completion of the test, those responsible for conducting the test shall compile a report on the test results in the form given in Annex 5 and submit it to the University management.