

**Physical Education and Health**  
(elective course)

*Guidelines for practical exercises for students of the 5th cours of the Faculty  
of Medicine specialty 222 «General Medicine»*

**MINISTRY OF HEALTH OF UKRAINE  
Kharkiv National Medical University**

**Physical Education and Health**

**(elective course)**

**Guidelines for practical exercises for students of the 5th year of the  
Faculty of Medicine specialty 222 "General Medicine"**

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**Topic 1: Volleyball player's starting positions. Positioning and transition of players on the playing court. Choice of starting position and movement for passing and receiving the ball. Special physical exercises for the development of physical characteristics of volleyball players. Improvement of game activities.**

**Lesson duration:** 2 lessons, 4 academic hours.

**Rationale:** Theoretical knowledge of volleyball is necessary for practical training.

**Purpose of the lesson:** to acquaint with the starting positions of the players, the correct location of the players on the playground.

**Graphological structure of the topic**

**The lesson plan:**

1. Introduction	10 min
2. Initial provisions;	20 min
3. Location and transitions of players on the play court	25 min.
4. Selecting the starting position and movement to pass and receive the ball. Special physical exercises for the development of physical qualities of volleyball players	25 min.
5. Summing up	10 min.

**Educational and material support of the lesson:**

Racks, net, antennas, volleyballs, stopwatch, whistle.

**Technological map of practical training**

<b>№</b>	<b>Educational material</b>	<b>Methodical instructions</b>
1	Introduction	
2	Knowledge of the passed material	Student survey
3	Starting positions	Location and transition of players on the playing cour
4	Selecting the starting position and moving to pass and receive the ball.	Special physical exercises for the development of physical qualities of volleyball players
5	Results	

## **Content**

Stands and movements should be mastered at the first stage of learning to play volleyball: first, each method separately, and then - in certain combinations. Learning to play volleyball should begin with the development of speed in conditions specific to this game, namely: a short distance for running (2-10 m), a quick starting jerk, sudden stops after a quick move, change of direction.

Ways of moving are studied in the following sequence: walking, running, moving with additional steps (left, right side) forward, face forward, back forward, double step, jump forward (back), stop step (jump).

The main tool in teaching volleyball are physical exercises, basic and competitive, auxiliary or training.

The study of volleyball begins with the study of stance and movements. There are three types of main stance: high, medium, low.

Preliminary exercises. Execution of movements slowly, in parts, with the use of visual landmarks and sound signals. Throwing and catching a stuffed ball: while moving; after stopping in various ways; after stopping and turning; with a subsequent fall.

In exercises on technique improve skills of the basic ways of movement: separately each way, combinations of ways among themselves, in combination with performance of receptions with a ball.

## **Control questions**

1. Starting positions;
2. Location and transitions of players on the playing court;
3. Select the starting position and move to pass and receive the ball. Special physical exercises for the development of physical qualities of volleyball

## **literature**

### **Basic**

1. Methodical recommendations for training and improving the reception of the ball from the serve / comp. I.V. Muschinina, E.G. Gorbachev. - Kiev, 1983. - 38 p.
2. Basics of volleyball / comp. O. Chekhov. - Moscow: FiS, 1974. - 168 p.
3. Fundamentals of single blocking in volleyball: a method of recommendation // comp. V.S. Kacharova. - Moscow, 1981. - 58 p.
4. Pimenov M.P. Volleyball / M.P. Pimenov - Kiev: Health, 1975. - 96 p.
5. Tuchynska T.A. Volleyball: educational and methodical manual [Electronic resource] / T.A. Tuchynska, E.V. Rudenko. - Cherkasy: ChNU named after Bohdan Khmelnytsky, 2014. - 76 p.

### **Auxiliary:**

1. Morozovsky O.L/ Synopsis of lectures on volleyball (for students of all specialties of the Academy of Disciplines "Physical Education", "Physical Culture") / O.L. Morozovsky; Hark. nat. acad. city households. - X: XHAMF, 2012. - 15 p.
2. Basics of technical training in volleyball in optional classes. Methodical instructions / Uklad. A.A. Chkhan, O.I. Pidluzhnyak, A. Yu. Gorbaty, O.A. Kolos. - Vinnytsia: VNTU, 2017. - 40 p

### **Internet resources**

1. [https://students.lnu.edu.ua/sport/wp-content/uploads/2015/04/lections\\_kurs.pdf](https://students.lnu.edu.ua/sport/wp-content/uploads/2015/04/lections_kurs.pdf)
2. <https://vseosvita.ua/library/instrukcia-tehniki-bezpeki-pid-cas-zanat-z-fizicnoi-kulturi-30763.html>
3. <https://studfile.net/preview/5461978/page:49/>

**Topic 2. Passing the ball with both hands from above and below. Receiving the ball with both hands from above and below. Varieties of serves and technique of its execution. Attacking blow. Blocking an attacking blow, its varieties. Insuring actions. Special physical exercises for the development of physical qualities of volleyball players. Improving game action.**

**Duration of teaching the topic:** 2 classes, 4 academic hours.

**Rationale:** theoretical knowledge of volleyball is very important for practical training.

**Purpose of the lesson:** formation of students' knowledge of the basic rules of the game, mastering the techniques and tactics of playing volleyball, acquiring the necessary knowledge, skills and abilities for independent pedagogical and organizational work in various fields of physical culture and sports.

### **Graphological structure of the topic**

#### **Lesson plan:**

1. Introduction	10 min
2. Passing the ball with both hands from above and below	20 min
3. Serving technique	20 min
4. Attacking strike technique	15 min
5. Blocking technique	15 min
6. Summing up	10 min

**Educational and material support of the lesson:**

Racks, net, antennas, volleyballs, stopwatch, whistle.

**Technological map of practical training**

<b>№</b>	<b>Educational material</b>	<b>Methodical instructions</b>
1	Introduction	
2	Knowledge of the passed material	Student survey
3	Passing the ball with both hands from above and below	Serving, attacking and blocking techniques
4	Results	

**Content**

Passing the ball has to be done with two and one hand, upper and lower way, when moving step, running, throwing, jumping, when receiving a ball flying at different speeds in different directions.

Serving - a blow by which the ball is introduced into the game. Given that the structure of training for all methods of feeding is basically the same, the sequence of their study is important: bottom straight, top straight with rotation (force) and without rotation (planning), top side with rotation (force) and without rotation (planning) feed in the jump.

Performing attacking strikes requires athletic training, development of strength, speed, agility and flexibility. The success of learning the methods of attacking blows largely depends on the accuracy of the transfer of the ball to hit, the degree of mutual understanding between the binder and the striker.

When learning to block, preparatory exercises should be included at the initial stage of learning. After mastering the preliminary exercises and the technique of the attack on the move, you must include the preliminary exercises and exercises on the technique of the blocking section and then follow at least the attacks without the block.

**Control questions**

1. Passing the ball with both hands from above and below
2. Serving technique
3. Attacking strike technique
4. Blocking technique

## **Literature**

### **Basic:**

1. Methodical recommendations for volleyball: for students of all specialties of the daytime form of training. -K.: National Academy of Statistics, Accounting and Auditing, 2012. - 11 p.
2. Volleyball in the program of physical education in KGASU: Methodological Guide / comp. Bachenina E.A., Bolotnikov A.A., Kalmanovich V.L., Trusova L.A. - Kazan: Publishing house "KVVKU", 2014. - 46 p.
3. Volleyball: teaching manual / T.A. Tuchinska, E.V. Rudenko. - Cherkasy: ČNU named after Bogdan Khmelnytsky, 2014. - 76 p.
4. Nosko M.O. Volleyball in physical education students: [handbook] / M.O. Nosko, O.A. Arkhipov, V.P. Zhula. - K.: "MP Lesya", 2015. - 396 p.
5. N.Y. Schepotina, V.M. Polischuk Theory and Methodology of Sports Games Education (Volleyball): Methodological Recommendations. Vinnitsa: VDPU, 2019. 48 p.

### **Auxiliary:**

1. Zheleznyak Yu D. Volleyball. / Y. D. Zheleznyak, A. V. Ivoylov - M: Fizkultura i sport, 1991. -238 p.
2. Platonov V. N. General theory of athletes training in Olympic sport. / V.N. Platonov. - K.: Olympic literature, 1997. - 584 p.

### **Internet resources**

1. [https://students.lnu.edu.ua/sport/wp-content/uploads/2015/03/lections\\_kurs.pdf](https://students.lnu.edu.ua/sport/wp-content/uploads/2015/03/lections_kurs.pdf)
2. <https://vseosvita.ua/library/instrukcia-tehniki-bezpeki-pid-cas-zanat-z-fizicnoi-kulturi-30764.html>

## **Topic 3. Exercises for the development of jumping. Exercises for the development of special flexibility of a volleyball player. Development of physical qualities. Improving game actions.**

**Duration of teaching the topic:** 2 classes, 4 academic hours.

**Rationale:** practical knowledge of volleyball is very important for the formation of qualified volleyball players.

**Purpose of the lesson:** mastering the techniques and tactical actions of playing volleyball, acquiring the necessary knowledge, skills and abilities for independent pedagogical and organizational work in various parts of physical culture and sports activities.



## **Graphological structure of the topic**

### **Lesson plan:**

- |  |        |
|--|--------|
| 1. Introduction  | 10 min |
| 2. Exercises for the development of jumping                                      | 20 min |
| 3. Exercises for the development of special flexibility of the volleyball player | 20 min |
| 4. Development of physical qualities   | 15 min |
| 5. Improving game action for   | 15 min |
| 6. Summing up  | 10 min |

### **Educational and material support of the lesson:**

Racks, net, antennas, volleyballs, stopwatch, whistle.

### **Technological map of practical training**

<b>№</b>	<b>Educational material</b>	<b>Methodical instructions</b>
1	Introduction	
2	Knowledge of the passed material	Student survey
3	Exercises for the development of jumping and special flexibility	Development of physical qualities and improvement of game actions
4	Results	

### **Content**

Exercises for the development of jumping (speed and strength qualities).

Squats and sharp straightening of the legs with the swing of the arms upwards. Same with jumping up. The same with a stuffed ball in hands. From a standing position on a gymnastic wall: the right (left) leg is strongly bent, the left (right) is lowered, hands to keep at face level - fast extension of a leg (from a wall not to deviate).

Exercises that develop flexibility are of a general and special effect. The development of general flexibility increases the amplitude of movements in all joints. Special flexibility is associated with the withdrawal of the hand that hits the ball. Exercises for the development of flexibility are divided into active and passive: active perform without burdens and with burdens, passive - with the help of a partner and with burdens.

Volleyball players need to develop those physical qualities that are especially needed for playing activities. These include: a) speed and power, b) endurance, c) agility, d) flexibility.

To increase the speed of the motor act, exercises are used that are performed at or near the maximum speed, for example, overcoming small segments in the shortest possible time.

Exercises that require an immediate response to a signal or situation are used to improve visual-motor reactions.

### **Control questions**

1. Exercises for the development of jumping
2. Exercises for the development of special flexibility of the volleyball player
3. Development of physical qualities
4. Improving game action for

### **Literature**

#### **Basic:**

1. Zheleznyak Y. D. Volleyball. / Yu.D. Zheleznyak, A.V. Ivoilov - M.: Fizkultura i sport, 1991. -238 p.
2. Platonov V. N. General theory of athletes training in Olympic sport. / V. N. Platonov. - K.: Olympic literature, 1997. - 584 p.
3. Filin V. P. The interrelation of physical qualities, technical preparedness and sport result of volleyball players. / V. P. Filin. // Theory and practice of physical training. - 1997. - № 5. - P. 16-20.
4. Shipulin G. Я. Efficiency of technical and tactical actions in competitive activity of highly qualified volleyball players. / G.Y. Shipulin, O.E. Serdyukov. // Theory and practice of physical training. - 2001. - № 5. - P. 34-36.
5. Shiryayev I. A. Volleyball: textbook / I. A. Shiryayev, E. K. Akhmerov. - Minsk: BSU, 2005. - 143 p.

#### **Auxiliary:**

1. Volleyball: The Educational Program for Children's and Youth Sports Schools, Specialized Children's and Youth Schools of Olympic Reserve, Schools of High Athletic Mastery. - K.: RNMK, 2009. 168 p.
2. Belyaeva A. B. Volleyball. / A. V. Belyaeva. - M.: Fizkultura, Education and Science, 2000. - 368 p.

### **Internet resources**

1. [https://students.lnu.edu.ua/sport/wp-content/uploads/2016/03/lections\\_kurs.pdf](https://students.lnu.edu.ua/sport/wp-content/uploads/2016/03/lections_kurs.pdf)
2. <https://vseosvita.ua/library/instrukcia-tehniki-bezpeki-pid-cas-zanat-z-fizicnoi-kulturi-20853.html>

**Topic 4. Technical and tactical training of volleyball players. Individual and group tactical actions of players in attack and defense. Interaction of front and back line players. Libero's actions. Special physical exercises for the development of physical qualities of volleyball players. Improving game action.**

**Duration of teaching the topic:** 2 classes, 4 academic hours.

**Rationale:** practical knowledge of volleyball is very important for the formation of qualified volleyball players.

**Purpose of the lesson:** mastering the techniques and tactical actions of playing volleyball, acquiring the necessary knowledge, skills and abilities for independent pedagogical and organizational work in various parts of physical culture and sports activities.

**Graphological structure of the topic**

**Lesson plan:**

1. Introduction	10 min
2. Technical and tactical training of volleyball players	20 min
3. Individual and group tactical actions of players in attack and defense	20 min
4. Interaction of front and back line players. Libero's actions	15 min
5. Special physical exercises for the development of physical qualities of volleyball players. Improving game action for	15 min
6. Summing up	10 min

**Educational and material support of the lesson:**

Racks, net, antennas, volleyballs, stopwatch, whistle.

**Technological map of practical training**

<b>№</b>	<b>Educational material</b>	<b>Methodical instructions</b>
1	Introduction	
2	Knowledge of the passed material	Student survey
3	Technical and tactical training of volleyball players	Development of physical qualities and improvement of game actions
4	Results	

## **Content**

The purpose of technical exercises: to improve a technique, mainly individually, as well as with the help of partners. Tactical exercises are designed to teach engaged in individual and collective tactical actions taken in volleyball. Improving the technique takes place in conditions typical of playing volleyball (tactical exercises, special game exercises and games in preparation for volleyball).

Tactics, as well as game technique, are divided into attack tactics and defense tactics. Game tactics consist of individual and team tactical actions. In attack, players must be able to choose the right place on the field and the method of action aimed at organizing the attack, to have a variety of attacking blows and apply them depending on the game situation.

Group tactical actions. This is the interaction of several players, aimed at preparing and successfully completing the attack. The basis of group tactical actions in the attack is the interaction of the player.

Libero players. Two of the team's 14 players can be appointed libero. Players of this role cannot take part in the attack, in the block and serve.

Special physical training helps to increase the level of activity of all systems of the player's body, which are necessary to improve motor skills.

## **Control questions**

1. Technical and tactical training of volleyball players.
2. Individual and group tactical actions of players in attack and defense.
3. Interaction of front and back line players. Player actions. Libero.
4. Special physical exercises for the development of physical qualities of volleyball players.

## **literature**

### **Basic:**

1. Demchishin A.A., Yu.D. Железняк. Basics of volleyball. - М: Fizkultura i sport, 1979. - 166 p.
2. Zheleznyak Yu.D. To mastery in volleyball. - М.: Fizkultura i sport, 1978. - 224 p.
3. Zaitsev G.K. Need-motivational sphere of physical education of students / G.K. Zaitsev // Theory and practice of physical culture. -1993.
4. Methods of teaching the technique of playing volleyball to students of higher educational institutions: Textbook. - KhNMU, 2012 - 104 p.
5. Sermeev B.V. Sportsmenam o vospitanii gibkosti: Uchebnoe posobie / B.V. Sermeev. - Moscow: Enlightenment, 1970. - 24 p.

### **Auxiliary:**

1. Methodical recommendations on volleyball: for students of all specialties of full-time education. - Kyiv: National Academy of Statistics, Accounting and Auditing, 2012. - 11 p.
2. Volleyball in the program on physical culture in KSASU: methodical manual / comp. Bachenina E.A., Bolotnikov A.A., Kalmanovich VL, Trusova L.A. - Kazan: KVVKU Publishing House, 2014. - 46 p.

### **Internet resources**

1. [https://students.lnu.edu.ua/sport/wp-content/uploads/2015/04/lections\\_kurs.pdf](https://students.lnu.edu.ua/sport/wp-content/uploads/2015/04/lections_kurs.pdf)
2. <https://vseosvita.ua/library/instrukcia-tehniki-bezpeki-pid-cas-zanat-z-fizicnoi-kulturi-30763.html>

## **Topic 5. Rules of competitions. The work of referees, the composition of the referees team, the division of responsibilities. Special physical exercises for the development of physical qualities of volleyball players. Improving game actions.**

**Duration of teaching the topic:** 2 classes, 4 academic hours.

**Rationale:** practical knowledge of volleyball is very important for the formation of qualified volleyball players.

**Purpose of the lesson:** mastering the techniques and tactical actions of playing volleyball, acquiring the necessary knowledge, skills and abilities for independent pedagogical and organizational work in various parts of physical culture and sports activities.

### **Graphological structure of the topic**

#### **Lesson plan:**

- |   |        |
|---|--------|
| 1. Introduction   | 10 min |
| 2. Rules of competitions  | 20 min |
| 3. The work of referees, the composition of the referees team, the division of responsibilities | 25 min |
| 4. Special physical exercises for the development of physical qualities of athletes             | 25 min |
| 5. Summing up   | 10 min |

#### **Educational and material support of the lesson:**

Racks, net, antennas, volleyballs, stopwatch, whistle.

### Technological map of practical training

<b>№</b>	<b>Educational material</b>	<b>Methodical instructions</b>
1	Introduction	
2	Knowledge of the passed material	Student survey
3	Rules of competitions	The work of referees, the composition of the referees team, the division of responsibilities
4	Special physical exercises for the development of physical qualities of athletes	
5	Results	

### Content

Volleyball is a sport played by two teams on a playing court divided by a net.

The game is played on a rectangular ground measuring 18x9 meters. The height of the net for men is 2.43 m, for women - 2.24 m. The game is played with a spherical ball in a circle of 65-67 cm, weighing 260-280 g. Each of the two teams consists of a maximum of 12 players, and there are 6 on the field at the same time. The object of the game is to send the ball over the net in order to ground it on the opponent's court, and to prevent the same effort by the opponent. The team has three hits for returning the ball (in addition to the block contact). The ball is put in play with a service, hit by the server over the net to the opponents. The rally continues until the ball is grounded on the playing court, goes "out" or a team fails to return it properly. In Volleyball, the team winning a rally scores a point (Rally Point System). When the receiving team wins a rally, it gains a point and the right to serve, and its players rotate one position clockwise.

A set (except the deciding 5th set) is won by the team which first scores 25 points with a minimum lead of two points. In the case of a 24-24 tie, play is continued until a two-point lead is achieved (26-24; 27-25; etc.). The match is won by the team that wins three sets. In the case of a 2-2 tie, the deciding 5th set is played to 15 points with a minimum lead of 2 points. If a team refuses to play after being summoned to do so, it is declared in default and forfeits the match with the result 0-3 for the match and 0-25 for each set. A team that, without justifiable reason, does not appear on the playing court on

time is declared in default with the same result. A team that is declared INCOMPLETE for the set or for the match, loses the set or the match. The opponent team is given the points, or the points and the sets, needed to win the set or the match. The incomplete team keeps its points and sets.

It is very important that the referees give the whistle to stop the play only if they have the following two conditions: they are sure that a mistake has been made or that there has been outside interference; they determined the nature of the error

To accurately inform teams about the nature of the error recorded by the judges (as well as viewers, viewers, etc.), judges are required to use official gestures. Only these gestures and no others (accepted in national competitions, private and personal gestures, or the manner of their implementation) can be used. As the speed of the game has increased, there may be problems with refereeing errors. To avoid this, the judging team must interact very harmoniously. After each game action, the referees need to look at each other to confirm their decision.

The purpose of special physical training - the development of physical qualities and abilities necessary for playing volleyball, as well as the specific identification of one of the main physical qualities or their complex in the motor activities of players on the court. For example, the qualities of force and speed are interrelated and are manifested in jumping. They allow you to perform jumps from a short run and from a place, to repeat them in difficult game conditions.

### **Control questions**

1. Competition rules;
2. The work of referees and the composition of the referees team, the division of responsibilities of each;
3. Special physical exercises for the development of physical qualities of volleyball players.

### **Literature**

#### **Basic:**

1. Demchyshyn A.P. Volleyball - A game for everyone. Kyiv: Zdorovya, 1986. 102 p.
2. Kichuk S.F., Sopotnytska OV Volleyball. Teaching technique and technology of judging. Ternopil: TNPU named after V. Hnatyuka, 2012. 104 p.
3. Moving and sports games at school / Demchyshyn A.P., Artyukh Z.M., Demchyshyn V.A., Thales IG Kyiv: Education, 1992. 175 p.
4. Official volleyball rules. Kyiv: 2016. 80 p.
5. Training of young volleyball players / Demchyshyn A.P. and others. Kyiv: Soviet School, 1982. 191 p.

6. Pimenov M.P. Volleyball. Special exercises. Kyiv: 1993. 196 p.

**Auxiliary:**

1. Methodical recommendations on training and improvement of reception of a ball from giving / sost. I.V. Muschinina, E.G. Gorbachev. - Kiev, 1983. - 38 p.

2. Pimenov M.P. Volleyball / MP Pimenov - Kiev: Health, 1975. - 96 p.

**Internet resources**

1. <http://eprints.cdu.edu.ua/85/1/Руденко%20мак.pdf>

2. [http://fizkulturamo.at.ua/publ/teoreticheskij\\_material/volejbol/istorija\\_rozvitku\\_volejbolu/6-1-0-2](http://fizkulturamo.at.ua/publ/teoreticheskij_material/volejbol/istorija_rozvitku_volejbolu/6-1-0-2)

3. [https://www.fivb.com/en/volleyball/thegame\\_glossary/officialrulesofthegames](https://www.fivb.com/en/volleyball/thegame_glossary/officialrulesofthegames)



**Educational edition**

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*(elective course)*

**Methodical instructions for practical classes for 5th cours  
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