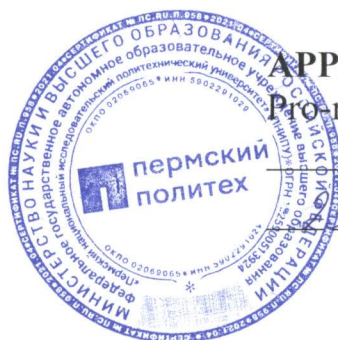


Ministry of Science and Higher Education of the Russian Federation

Federal State Autonomous Educational Institution of Higher Education  
**Perm National Research Polytechnic University**



**APPROVED BY**

Pro-rector for Academic Affairs

N.V. Lobov

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5 11 2021

### ACADEMIC COURSE WORKING PROGRAM

**Academic course:** Applied physical culture - elective modules of the discipline according to the kinds of sport  
\_\_\_\_\_  
(Name)

**Form of education:** Full-time  
\_\_\_\_\_  
(Full-time /full-time - correspondence/correspondence)

**Level of higher education:** Bachelor's program  
\_\_\_\_\_  
(Bachelor's program/specialist program/Master's program)

**Workload in hours (in credits):** 328 (0)  
\_\_\_\_\_  
(Hours (CU))

**Training program (degree):** 15.03.06 Mechatronics and Robotics  
\_\_\_\_\_  
(Code and denomination of degree)

**Direction:** Mechatronics and Robotics  
\_\_\_\_\_  
(Title of curriculum)

## 1. General Provisions

### 1.1. Goals and Objectives of the Course

The goal of the discipline is the formation of the ability of a specially directed and selective use of physical culture, sports for psychophysical training and self-preparation for a specific professional activity.

Discipline objectives:

- the formation of a motivational-value attitude to physical culture, an attitude towards a healthy lifestyle, physical self-improvement and self-education, the need for regular exercise and sports;
- formation of a system of skills and abilities that ensure the preservation and strengthening of health, mental well-being, development and improvement of psychophysical abilities, qualities and personality traits, self-determination in physical culture and sports;
- acquiring personal experience of increasing motor and functional capabilities, ensuring general and professionally applied physical readiness for a future profession and life;
- gaining experience in the creative use of physical culture and sports activities to achieve professional and life goals;
- education of applied psychophysical and special qualities necessary in the conditions of professional activity.

### 1.2. Studied Objects of the Course

applied physical exercises and certain elements of various sports; applied sports

### 1.3. Starting Conditions

Unstipulated

## 2. Planned Results of the Course Training

Competence	Indicator's Index	Planned Results of the Course Training (to know, to know how, to master)	Indicator of Attaining Competence which the planned results of training are correlated with	Means of Assessment
UC-7	IA-1.UC-7	<b>To know</b> scientific and practical fundamentals of physical culture and healthy lifestyle; the impact of physical culture systems on improvement health, on prevention disease and bad habits; control methods, assessment and correction of physical development	<b>Knows</b> the level of requirements and level assessment principles of physical preparedness for social and professional work; ways and methods of increasing the level of physical human development.	Interview

		and physical preparedness; rules and methods of planning individual lessons of different target focus.		
UC -7	ID-2.UC-7	<b>To be able to</b> apply methods and means of physical culture and sports activities; perform individually selected complexes of wellness and adaptive (therapeutic) physical education, sets of exercises; perform the simplest relaxation techniques.	<b>Is able to</b> assess the level of physical preparedness for subsequent professional activities; to monitor the state of his physical development and to manage its condition.	Test
UC -7	IA-3.UC-7	<b>To master the skills</b> of directed formation and development of the most important properties and personality traits to preserve and strengthen health, physical development and preparedness.	<b>Masters the skills</b> of assessment, control and management of physical development state; as well as of definitions of sufficient (comfortable) state for a full social and professional activities.	Test

### 3. Full time and forms of academic work

Form of academic work	Hours in all	Distribution in hours according to semesters						
		Number of semester						
		1	2	3	4	5	6	
1. Holding classes (including results monitoring) in the form:	328	36	72	36	72	56	56	
1.1. Contact classwork, including:								
- lectures (L)								
- laboratory work (LW)								
- practice, seminars and/or other seminar-type work (PW)	316	34	70	34	70	54	54	
- control of self-work (CSW)	12	2	2	2	2	2	2	
- test								
1.2. Students' self-work (SSW)								
2. Intermediate attestation								
Exam								
Grading test								
Test (Credit)	54	9	9	9	9	9	9	
Course Project (CP)								
Course Work (CW)								
<b>Workload in hours</b>	<b>328</b>	<b>36</b>	<b>72</b>	<b>36</b>	<b>72</b>	<b>56</b>	<b>56</b>	

#### 4. Course outline

Name of the units with the course outline	Full time of classroom activity in hours according to the forms			Full time of extracurricular work in hours according to the forms
	L	LW	PW	SSW
1 <sup>st</sup> semester				
Topic 1. General physical training	0	0	16	0
Methods for assessing and developing general endurance. Methods for assessing and developing high-speed abilities. Methods for assessing and developing power abilities. Methods for assessing and developing flexibility				
Topic 2. Classes by sports	0	0	18	0
Special physical training. Training the technique of the sport. Sports tactics training. Competitive practice. Judicial practice.				
Total with regard to 1 semester	0	0	34	0
2 <sup>nd</sup> semester				
Topic 1. Classes by sports	0	0	70	0
Special physical training. Training the technique of the sport. Sports tactics training. Competitive practice. Judicial practice.				
Total with regard to 2 semester	0	0	70	0
3 <sup>rd</sup> semester				
Topic 1. Classes by sports	0	0	34	0
Special physical training. Training the technique of the sport. Sports tactics training. Competitive practice. Judicial practice.				
Total with regard to 3 semester	0	0	34	0
4 <sup>th</sup> semester				
Topic 1. Classes by sports	0	0	70	0
Special physical training. Training the technique of the sport. Sports tactics training. Competitive practice. Judicial practice.				
Total with regard to 4 semester	0	0	70	0
5 <sup>th</sup> semester				
Topic 1. Classes by sports	0	0	54	0
Special physical training. Training the technique of the sport. Sports tactics training. Competitive practice. Judicial practice.				
Total with regard to 5 semester	0	0	54	0
6 <sup>th</sup> semester				
Topic 1. Classes by sports	0	0	54	0
Special physical training. Training the technique of the sport. Sports tactics training. Competitive practice. Judicial practice.				
Total with regard to 6 semester	0	0	54	0
Total with regard to the course	0	0	316	0

## Topics of approximate practical work

Sl. №	Topic of practical (seminar) work
1	Practical training in sports.

## Topics of approximate laboratory practice

Sl. №	Topic of laboratory work
	Unstipulated Not provided

## 5. Organizational and Pedagogical Conditions

### 5.1. Educational Technologies Used for Competences Formation

The content of the program for the discipline "Applied physical culture - elective modules for sports" is developed on the basis of the basic component "Physical culture and sport", focused on the formation of the foundations of physical culture of the individual.

The variation component relies on the basic one, supplements it, taking into account regional conditions and traditions of the development of physical culture, and includes the following modules by type of sports:

- basketball;
- volleyball;
- table tennis;
- football;
- Athletics;
- Weightlifting;
- skiing;
- chess.

Practical lessons provide mastering the methods and ways of physical culture and sports activities to achieve educational, professional and life goals of a person, the acquisition of experience in creative, practical activities, the development of independence in physical culture and sports in order to increase the level of functional and motor abilities, directed formation and development of the most important properties and qualities of the individual.

### 5.2. Students' Manual for the Course Study

Learning the course, it is advisable for students to implement the following recommendations:

1. Learning of the discipline should be done systematically.
2. After learning one of the course units with the help of the text-book or lecture notes it is recommended to reproduce the basic terms, definitions, notions of the unit from memory.
3. Special attention should be paid to the reports on practical studies and

individual complex tasks for self-work.

4. The topics list for individual study is given by the teacher at the lectures. The teacher also provides students with literary sources (first of all, new ones in the periodical scientific literature) for a more detailed understanding of the issues presented at the lectures.

## 6. List of Teaching Materials and Information Supply for Students' Self work in the Discipline

### 6.1. Paper-based courseware

Sl.No	Bibliographic entry (author, title, mode of publication, place, publishing house, year of publication, number of pages )	Number of copies in the library
<b>1. Basic literature</b>		
1		
<b>2. Additional literature</b>		
<b>2.1. Educational and scientific literature</b>		
1	Paland N., Schwedes R. Occupational Safety and Health in Germany : An Overview. Bonn : Federal Min. of Labour & Social Affairs, 1991. 95 p.	1
2	Cockerham W.C. Medical Sociology. 9 ed Upper Saddle Ri : Pearson Education, 2004. 420 p.	1
<b>2.2. Standardized and Technical literature</b>		
	Not used	
<b>3. Students' manual in mastering discipline</b>		
	Not used	
<b>4. Teaching and learning materials for students' self work</b>		
	Not used	

### 6.2. Electronic Courseware

Kind of literature	Name of training tool	Reference to information resource	Accessibility of EBN (Internet/local net; authorized free assess )
Basic literature	Vykhodtsev A. N. Manual to practical sessions on medical supervision in physical exercise, sports and clinical practice / Grebenkina N. V., Pashkov V. K., Pashkova E. N., Shpilevaya L. I. Tomsk, SibSMU, 2019.	URL: <a href="https://elib.pstu.ru/Record/lanRU-LAN-BOOK-138710">https://elib.pstu.ru/Record/lanRU-LAN-BOOK-138710</a>	authorized free assess

### 6.3. License and Free Distributed Software used in the Course Educational Process

Type of Software	Software branding
OS	Windows 10 (подп. Azure Dev Tools for Teaching)
Office applications	Adobe Acrobat Reader DC. Free PDF viewer
Office applications	Microsoft Office Professional 2007. persons. 42661567

### 6.4. Modern Professional Databases and Inquiry Systems Used in the Course Educational Process

Branding	Reference to information resource
Scientific Library of the Perm National Research Polytechnic University	<a href="http://lib.pstu.ru/">http://lib.pstu.ru/</a>
Lan electronic library system	<a href="https://e.lanbook.com/">https://e.lanbook.com/</a>
Electronic library system IPRbooks	<a href="http://www.iprbookshop.ru/">http://www.iprbookshop.ru/</a>
Information resources of the Network Consultant Plus	<a href="http://www.consultant.ru/">http://www.consultant.ru/</a>

## 7. Logistics of the Course Educational Process

Type of classes	Name of the necessary basic equipment	Number of units
Practical lesson	Volleyball hall (volleyball net, sports equipment)	1
Practical lesson	Wrestling hall (wrestling mats, climbing rope, crossbar, special sports equipment)	1
Practical lesson	Kettlebell lifting hall (kettlebells, special sports equipment)	1
Practical lesson	Table tennis hall (tennis tables, sports equipment)	1
Practical lesson	General physical training room (wall bars, mats, hanging bars, inclined boards, fitballs, jump ropes, parallel bars)	1
Practical lesson	Mirror room for aerobics (mirrors)	1
Practical lesson	Ski lodge (150 sets of ski equipment, ski track equipment, snowmobile)	1
Practical lesson	An open-air sports arena with 2 mini-football pitches, a long jump pit and a universal sports ground (mini-football gates, basketball backboards, volleyball stands, wall bars, hanging bars, parallel bars, inclined boards, sports equipment)	1
Practical lesson	Gym (simulators, dumbbells, barbells, pancakes, arm wrestling tables, mirrors)	1

## 8. Fund of the Course Evaluating Tools

Described in a separate document