### Prof. Dr. Boryana Tumanova

# on the Thesis Submitted for Awarding the Educational and Scientific Degree "Doctor" (Ph.D.)

Professional Direction 1.3. Pedagogy of ...(Physical Education in – fitness disciplines) Sofia University "St. Kliment Ohridski" Department of Sport-Individual Sports and Recreation

Author: Nikoleta Dimitrova Bocheva – PhD student of self-education

# Topic: "MODEL FOR INCREASING THE PHYSICAL FITNESS OF STUDENTS WITH THE MEANS OF CIRCULAR TRAINING"

Scientific Leader: Assac. Mikhail Konchev, PhD

The analysis of the documents under the procedure shows that the candidates submitted in the competition are:

- 1. Dissertation work
- 2. Author's
- 3. Publications 3 pieces
- 4. Declaration of originality

#### **Dissertant data**

Assnistant Nikoleta Bocheva has completed her higher education at the National Academy of Sciences "Vasil Levski" with a bachelor's degree - Coach of Sports Aerobics, Teacher of Physical Education and Sports Management. Magister's degree - Creation and realization of sports shows. He works as an assistant professor in the Department of Sport of Sofia University "Kliment Ohridski" from 2018 to today. During the same period, he was the coach of the representative team of the University of Majorette Disciplines. He is also involved in sports acrobatics, health sports and basic gymnastics for children from 4 to 18 years of age. Her professional career has gone through a teacher in sports, preparing children for competitions, tournaments, festivals and artist-aerial acrobatics.

### Abstract data

The abstract is structured and summarizes the content of the dissertation. is structured and reflects in summary the content of the dissertation. The various main parts of scientific work are presented – study, working hypothesis, purpose, tasks, methods of research, to the essence namely obtained results and analyses, formed conclusions, recommendations and scientific contributions.

The PhD student has fulfilled the requirement for publicity of work before official protection, presenting three publications in a reference journal in which he is an independent author. They reflect parts of the results, analyses and conclusions of the dissertation work, which allows to build an objective initial idea of the process of its creation.

#### **Dissertation Data**

#### General presentation of the procedure

### Topicality, structure and knowledge of the problem

The selected and developed theme of the dissertation work is contemporary and significant with many applied aspects aimed at fitness disciplines. Look at the possibility of improving not the learning process and increasing students ' mobility through new approaches. This would increase their interest and activity for sports activities in particular on the principle of circular training. An up-to-date contemporary problem that would find significance in increasing motivation and the need to perform motor activity, increase working capacity, strengthen health.

# REVIEW

The dissertation is distinguished by a clear structure, has the separation of chapters, sections and subsections at a structural and meaningful level, which on the one hand facilitates the perception of information, on the other - shows the PhD student's ability to systematize information.

The following is the generally accepted model and structure for this type of scientific work, presented in 203 pages, which includes 50 tables, 35 figures and 16 photos. The work is structured in introduction, four chapters, bibliography and 9 applications. 178 pages are subject to review.

The bibliography includes 162 sources, of which 39 in Cyrillic, 113 in Latin and 10 websites. 18 redundancies were used.

The introduction (2 p.) presents the motivation of the dissertant, which observes a tendency for more and more students to show desires for new and interesting activities by choosing sports that are aimed at fitness disciplines. Questions related to the constantly increasing tension and intensity of curricula imply the preservation and maintenance of high working capacity, health care and physical fitness. They are interested in university lecturers in the field of sports. This once again proves the importance, usefulness and timely development of the topic chosen by a PhD student.

Chapter 1 "Literary Review" (45 pp.) includes five sections. Through the theoretical overview in this chapter, the PhD student gradually enters into the problem. It provides an in-depth, multifaceted analysis of information from theoretical, scientific and applied and practical publications of professionally proven authors on the issues of research. Discussed in detail by the theory of physical education and sport are: the emergence and development of fitness disciplines, as part of physical education and sports in the higher education system, their classification, physical fitness and physical qualities. Special attention is given to the fitness disciplines, as a factor in physical education and sports in universities to increase the motor qualities of students, as well as in the preventiveness of their health. This directs the reader to the necessary completion of this chapter and summarizes the scientific problem by formulating the working hypothesis on page 52. According to the hypothesis, *the experimental methodology used in the work, including a complex of exercises with methods and means of circular training applied over a period of three months, would develop the physical fitness of the students of Sofia University "St. Kliment Ohridski"* 

# REVIEW

What is new here is related to the main features of fitness disciplines, which, depending on the focus of the load, affect differently the body of those involved. This allows, on the basis of logical selection, both the types of fitness activities and the basis of their content to work as a priority for different qualities in specific activities. This makes these disciplines an ideal means of maintaining high levels of the motor ability of those involved and assists in determining the subject, subject, purpose and tasks of the study in the second chapter of the dissertation "Purpose, Tasks, Organization and Methodology of The Study" consisting of 35 pages with a classical structure. Presents a well-formulated objective, six tasks and the organization of scientific research. The subject, object and contingent of the study (44 female students) were correctly defined. The organization was implemented in three stages held between July 2018 and March 2020. The methods used are well chosen, a prerequisite for comprehensive examination and examination of the scientific problem posed and achievement of its purpose. The study interprets the results of the study and analysis of literary and other information sources - survey with students of SU Kliment Ohridski" from 1th to 4th course, participated in sports-profiled circular training activities in order to establish their diet; sports-pedagogical testing before and after application of the developed model; conducting the pedagogical experiment, which allows to compare the effectiveness of different approaches, means or methods in the preparation of students; application of mathematical and statistical methods and means of analysis of the results obtained from testing.

A test battery according to the Eurofit methodology is also composed of 10 indicators, of which four are anthropometric (table 3), five physical activity indicators(table 4)and one functional (table5).

The methods used for mathematical and statistical processing of the results are: Multimetered frequency analysis; Variational analysis; Students T Test for dependent samples; Wilcoxon Non-Parametric Sampling Test (Wilcoxon Signed Rank Test); Tests of Kolmogorov-Smirnov and Shapiro-Wilk to check the normality of data distribution; Inequality of Shevishev; Sigman method. The results were processed with the SPSS v.25 and EXCEL 2016 software pact. The rich set of methods of mathematical and statistical processing greatly increases the quality of the dissertation.

With great value, I determine the presented modified by the author at the end of this chapter MODEL FOR INCREASING PHYSICAL FITNESS WITH THE MEANS OF CIRCULAR WORKOUT.

# REVIEW

The training model has a different focus. It's one school year with one break during the winter session. In key activities 2 times a week and allows to increase the density of activities, control the intensity, save time in the activities. Implies the achievement of a large forming effect given the specificity of the load.

Chapter three "Analysis of results" has a volume of 70 pages. Here is shown all the practical work carried out by the PhD student. The results of the collected and processed data were analyzed. The presented figures, tables and photos give an insight into the results obtained. I find it essential for the theory and practice of physical education, the assessment of practical effect (Chapter III). 3.) from the application of circular training to female students who have enrolled in sport-profiled "Circuit training" activities, taking the most significant contribution in terms of physical fitness indicators.

Everything presented in the development so far opens up the possibility to formulate conclusions and recommendations on the practice set out in chapter four with a volume of 2 p. They run from the results obtained and provide a logical response to the tasks assigned. The author of the dissertation pays attention to adequate changes in the curricula and the methodologies applied in the Higher School. The citation and reference of authors, publications and sources in the dissertation work is according to the established standards.

#### **Scientific contributions:**

The overall analysis of the dissertation work makes it possible to outline its contributions in a scientific and theoretical and scientific-practical plan, namely that the motivation of students and their interest in sports is related to offering curricula with modern models and new fitness activities. New approaches have been sought to increase students' interest and activity in sports activities. The proposed model can be adapted for any situation and applied in beginners due to the easy absorption of its principles and content.

### **Critical Notes**

It is established that the recommendations and critical notes made by us in the internal discussion of the dissertation work have been taken into account in its entirety. Appropriate structural and meaningful adjustments have been made. I have no critical notes to the material submitted for evaluation. I would recommend that the PhD student continue his research work in the future by expanding the field of thesis.

### **Conclusion:**

The results of the research and analysis carried out will contribute to the enrichment of sports science. The scientific work has a complete appearance. The PhD student has shown solid theoretical training, precision and correctness in carrying out the research, skills that allow independent work in the research field. I find no forms of plagiarism, undoubtedly the work is realized by the author and shows competence in this field, as well as the scientific leader. The presented doctoral work meets all the conditions and requirements, which allows me with conviction to propose to the esteemed scientific jury to highly appreciate the work of the Nikoleta Dimitrova Bocheva and to award the educational and scientific degree "Doctor" in professional field – 1.3 Pedagogy of the training in... (Methodology of training in physical education and sports – fitness disciplines).

05.02.2022 г.

Prof.. Boryana Tumanova,