



## COURSE DESCRIPTION

### 1. Program identification information

1.1 Higher education institution	National University of Science and Technology Politehnica Bucharest
1.2 Faculty	Electronics, Telecommunications and Information Technology
1.3 Department	Electronic Devices, Circuits and Architectures
1.4 Domain of studies	Electronic Engineering, Telecommunications and Information Technology
1.5 Cycle of studies	Bachelor/Undergraduate
1.6 Programme of studies	Microelectronics, Optoelectronics and Nanotechnologies

### 2. Date despre disciplină

2.1 Course name (ro) (en)	Educație fizică și sport 4 Physical Education and Sports 4						
2.2 Course Lecturer	Assoc. Prof. Dr. Narcis Neagu						
2.3 Instructor for practical activities	Assoc. Prof. Dr. Narcis Neagu						
2.4 Year of studies	2	2.5 Semester	2	2.6. Evaluation type	V	2.7 Course regime	Ob
2.8 Course type	C	2.9 Course code	04.C.04.O.021	2.10 Tipul de notare	Nota		

### 3. Total estimated time (hours per semester for academic activities)

3.1 Number of hours per week	1	Out of which: 3.2 course	0.00	3.3 seminary/laboratory	1
3.4 Total hours in the curricula	14	Out of which: 3.5 course	0	3.6 seminary/laboratory	14
Distribution of time:					hours
Study according to the manual, course support, bibliography and hand notes Supplemental documentation (library, electronic access resources, in the field, etc) Preparation for practical activities, homework, essays, portfolios, etc.					11
Tutoring					0
Examinations					0
Other activities (if any):					0
3.7 Total hours of individual study	11.00				
3.8 Total hours per semester	25				
3.9 Number of ECTS credit points	1				

### 4. Prerequisites (if applicable) (where applicable)

4.1 Curriculum	Not applicable
4.2 Results of learning	Not applicable

### 5. Necessary conditions for the optimal development of teaching activities (where applicable)



5.1 Course	Not applicable
5.2 Seminary/ Laboratory/Project	Sports field, gym equipped with equipment and materials specific to the activity, Moodle platform and Microsoft Teams

**6. General objective** (*Referring to the teachers' intentions for students and to what the students will be thought during the course. It offers an idea on the position of course in the scientific domain, as well as the role it has for the study programme. The course topics, the justification of including the course in the curricula of the study programme, etc. will be described in a general manner*)

The study program is framed within the policy and strategy of the NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY POLITEHNICA BUCHAREST, both in terms of content and structure, as well as in terms of learning outcomes and the openness offered to students on the labor market in the field of Business Engineering. The subject meets the current requirements of economic development and evolution at the national and international level of the higher technical education system by training business specialists capable of solving problems in a knowledge-based economy. The subject specifically meets current development and evolution needs nationally and internationally by contributing to optimizing health status; preventing the onset of global and segmental physical deficiencies; forming and maintaining correct body postures; stimulating students' interest in systematic and independent practice of physical exercise individually and collectively, daily or weekly; creating the habit of observing sports hygiene rules and preventing accidents; developing self-defense and self-improvement capacity. The general objective of the course involves: increasing physical and intellectual effort capacity; harmonious development of the body; optimizing health status; preventing the onset of global and segmental physical deficiencies; forming and maintaining correct body postures

**7. Competences** (*Proven capacity to use knowledge, aptitudes and personal, social and/or methodological abilities in work or study situations and for personal and professional growth. They reflect the employers requirements.*)

<b>Specific Competences</b>	Consolidation of basic notions from the school of running, jumping and throwing
<b>Transversal (General) Competences</b>	Maintaining an optimal state of health. acquiring running, jumping and throwing skills performed correctly

**8. Learning outcomes** (*Synthetic descriptions for what a student will be capable of doing or showing at the completion of a course. The learning outcomes reflect the student's accomplishments and to a lesser extent the teachers' intentions. The learning outcomes inform the students of what is expected from them with respect to performance and to obtain the desired grades and ECTS points. They are defined in concise terms, using verbs similar to the examples below and indicate what will be required for evaluation. The learning outcomes will be formulated so that the correlation with the competences defined in section 7 is highlighted.*)



<b>Knowledge</b>	<p><i>The result of knowledge acquisition through learning. The knowledge represents the totality of facts, principles, theories and practices for a given work or study field. They can be theoretical and/or factual.</i></p> <p>The result of assimilating information through learning. Knowledge represents the set of facts, principles, theories, and practices related to a specific field of work or study. It can be theoretical and/or factual. · Lists the most important stages that marked the development of the field · Defines notions specific to the field · Describes/classifies notions/processes/phenomena/structures · Deepens certain notions of physical education and sport, as well as their place within the instructional–educational systems · Knows basic terminological notions from the practiced sports branches · Knows general rules regarding the organization of competitions · Awareness of the beneficial effects of attending physical education and sport classes Definition of the concept of leisure and recreation</p>
<b>Skills</b>	<p><i>The capacity to apply the knowledge and use the know-how for completing tasks and solving problems. The skills are described as being cognitive (requiring the use of logical, intuitive and creative thinking) or practical (implying manual dexterity and the use of methods, materials, tools and instrumentation).</i></p> <p>Selects and groups relevant information in a given context · Works productively in a team · Analyzes and compares the obtained data · Acquires and improves technical elements from the practiced sport branch · Develops biomotor abilities (strength, endurance, speed, coordination, flexibility) · Develops the ability to work in a team, to respond promptly, correctly, and efficiently to requests, to make quick decisions with presence of mind · Identifies solutions and develops plans for solving · Argues the identified solutions/modes of solving · Understands the concept of health in the current lifestyle · Understands the importance of practicing physical exercises for maintaining health and work capacity, for combating certain diseases and deficiencies · Performs efficiently and effectively the tasks for organizing and conducting sports activities</p>
<b>Responsibility and autonomy</b>	<p><i>The student's capacity to autonomously and responsibly apply their knowledge and skills.</i></p> <p>Selects suitable bibliographic sources and analyzes them. · Respects the principles of academic ethics, correctly citing the bibliographic sources used. · Demonstrates receptiveness to new learning contexts. · Shows collaboration with other colleagues and teaching staff in carrying out teaching activities. · Promotes moral, civic, and will qualities. · Promotes the spirit of fair play in interpersonal relations. · Demonstrates autonomy in organizing the learning situation/context or the problem situation to be solved. · Manifests social responsibility through active involvement in student social life/involvement in events within the academic community. · Promotes/contributes with new solutions, related to the field of specialization, to improve and optimize the quality of social life.</p>

**9. Teaching techniques** (Student centric techniques will be considered. The means for students to participate in defining their own study path, the identification of eventual fallbacks and the remedial measures that will be adopted in those cases will be described.)

Starting from the analysis of students' learning characteristics and their specific needs, the teaching process will explore both expository teaching methods (lecture, presentation) and interactive conversational methods, based on discovery learning models facilitated by the direct and indirect exploration of reality (experiment, demonstration, modeling), as well as action-based methods such as exercise, practical activities, and problem solving. In the teaching activity, verbal methods (storytelling, explanation, lecture, conversation, brainstorming, and individual study) will be used predominantly, along with intuitive methods (demonstration, use of iconographic materials, and observation of other subjects' execution) and practical methods (practice for forming motor skills and abilities; practice for the development and education of motor qualities; practice for optimizing bodily physical development; practice for forming organizational



capacity; practice for forming the capacity to autonomously practice physical exercises; practice for forming the capacity to independently practice physical exercises). In the teaching activity, lectures will be used, based on PowerPoint presentations or various short films that will be made available to students. The presentations use images and diagrams so that the information presented is easy to understand and assimilate. This subject covers information and practical activities intended to support students in their learning efforts and in developing optimal relationships of collaboration and communication in a climate conducive to discovery learning.

**10. Contents**

<b>SEMINARY</b>		
<b>Crt. no.</b>	<b>Content</b>	<b>No. hours</b>
1	Athletics: elements from the school of running, jumping. Gymnastics: drill exercises and formations Aerobic gymnastics: exercise complexes Applied courses combined with elements of running, balance, climbing, crawling, scrambling, carrying; Sports games: basketball, football/soccer, volleyball Global practice of the game on reduced-size courts	14
	<b>Total:</b>	14
<b>Bibliography:</b> Bibliografie: Bompă T., Teoria și metodică antrenamentului, Edit. Tana, 2008 Colibaba D. E., Praxiologie și proiectare curriculară în educație fizică și sport, Craiova, Edit. Universitaria, 2007 Epuran M. Metodologia cercetării activităților corporale. Exerciții fizice, sport, fitness, Ed. Fest, București, 2005 Tudor V., Capacitățile condiționale coordinative și intermediare, componente ale capacității motrice. Ed. RAI, București, 1999		

**11. Evaluation**

Activity type	11.1 Evaluation criteria	11.2 Evaluation methods	11.3 Percentage of final grade
11.4 Course			
11.5 Seminary/laboratory/project	Attendance of physical education and sports classes	Ongoing assessment	80%
	Passing the control tests	Final assessment	20%
11.6 Passing conditions			
Fulfilling the obligations characteristic of seminar/laboratory/project activities; fulfilling the obligations characteristic of individual study activities; The result of the final assessment for a subject results from summing the points allocated to each activity within the subject (points whose sum is 100), and the total score is converted into a grade (from 1 to 10) by dividing by 10 and rounding (except for grade 5, which is obtained by truncation). The minimum score for passing a subject is 50 points.			

**12. Corroborate the content of the course with the expectations of representatives of employers and representative professional associations in the field of the program, as well as with the current state of knowledge in the scientific field approached and practices in higher education institutions in the European Higher Education Area (EHEA)**



**Universitatea Națională de Știință și Tehnologie Politehnica București**  
**Facultatea de Electronică, Telecomunicații și**  
**Tehnologia Informației**



There is a close correlation between the objectives of the subject and employers' needs

Date	Course lecturer	Instructor(s) for practical activities
25.09.2025	Assoc. Prof. Dr. Narcis Neagu	Assoc. Prof. Dr. Narcis Neagu
Date of department approval	Head of department	
26.09.2025	Prof. Dr. Claudiu Dan 	
Date of approval in the Faculty Council	Dean	
26.09.2025	Prof. Dr. Mihnea Udrea 	