

COURSE SHEET

1. Data about the program

| | |
|-----------------------------------|---|
| 1.1 Higher education institution | Babeş-Bolyai University |
| 1.2 Faculty | Faculty of Physical Education and Sport |
| 1.3 Doctoral school | Physical Education and Sport |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Study cycle | Doctorate |
| 1.6 Study program / Qualification | Doctoral training / Doctor of Sports Science and Physical Education |

2. Course data

| | | | | | | | |
|--------------------------------------|------------------------------------|--------------|---|-------------------------|---|----------------------|----|
| 2.1 Name of discipline | Study techniques of human movement | | | | | | |
| 2.2 Teacher responsible for lectures | Prof. Iacob Hanțiu | | | | | | |
| 2.3 Teacher responsible for seminars | Prof. Iacob Hanțiu | | | | | | |
| 2.4 Year of study | I | 2.5 Semester | 1 | 2.6. Type of evaluation | E | 2.7 Course framework | CD |

3. Estimated total time of teaching activities (hours per semester)

| | | | | | |
|---|----|----------------------------|----|-----------------------------------|------------|
| 3.1 Hours per week | 3 | Out of which: 3.2 Lectures | 2 | 3.3 Seminars / Laboratory classes | 1 |
| 3.4 Total hours in the curriculum | 36 | Out of which: 3.5 Lectures | 24 | 3.6 Seminars / Laboratory classes | 12 |
| Allocation of study time: | | | | | h |
| Study supported by textbooks, other course materials, recommended bibliography and personal student notes | | | | | 30 |
| Additional learning activities in the library, on specialized online platforms and in the field | | | | | 70 |
| Preparation of seminars / laboratory classes, topics, papers, portfolios and essays | | | | | 30 |
| Tutoring | | | | | 34 |
| Examinations | | | | | 4 |
| Other activities: - | | | | | |
| 3.7 Individual study (total hours) | | | | | 164 |
| 3.8 Total hours per semester | | | | | 200 |
| 3.9 Number of credits | | | | | 8 |

4. Preconditions (where applicable)

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|-----------------|---|
| 4.1 Curriculum | <ul style="list-style-type: none"> It's not necessary |
| 4.2 Competences | <ul style="list-style-type: none"> Minimum level of English B1 + |

5. Conditions (where applicable)

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| 5.1 Conducting lectures | Classroom equipped with video projection equipment |
| 5.2 Conducting seminars / laboratory classes | Classroom equipped with video projection equipment |

6. Specific competences acquired

| | |
|---------------------------------|---|
| Professional competences | <ul style="list-style-type: none"> • Knowledge of descriptive designs of scientific research in physical education and sports. • Knowledge and understanding of the stages of designing experimental research in physical education and sports. • Knowledge and understanding of the stages designing experimental / quasi-experimental research and their role in research. • The importance of using software in research in physical education, sports and physical therapy. • Knowledge of the main components of the EXCEL and SPSS packages and the conditions under which they can be applied. • Knowledge and application of ethical norms in scientific research in the field. • Possibility to explain the advantages and disadvantages of the main methods of descriptive, experimental or quasi-experimental research. • Designing research (choosing the research design, variables, experimental tasks, specific research conditions, data analysis method). • Formulating and interpreting the results. • Choosing the method of data analysis taking into account: the characteristics of the research design, type of measurement scale used, number of variables involved (independent and dependent). • Interest in empirical research in the field of physical education, sports and physical therapy. |
| Transversal competences | <ul style="list-style-type: none"> • Efficient and effective development of team activities. • Efficient use of information sources and communication resources and assisted professional training, both in Romanian and in a language of international circulation. • Applying the rules of rigorous and efficient work, manifesting responsible attitudes towards the scientific and didactic field, for the optimal and creative capitalization of one's own potential in specific situations, respecting the principles and norms of professional ethics. |

7. Course objectives (based on the acquired competences grid)

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|---|---|
| 7.1 The general objective of the course | <ul style="list-style-type: none"> • Acquiring knowledge in order to develop a project descriptive or experimental scientific research as well as analysis statistics and interpretation of scientific data. • Training skills for designing and performing scientific research, respectively writing a project, article or scientific research report. |
| 7.2 Specific objectives | <ul style="list-style-type: none"> • Knowledge of the necessary steps in conducting scientific research. • Analysis and interpretation of research data |

8. Content

| 8.1 Lectures | Teaching methods | Comments |
|--|---|----------|
| 1. Introduction to scientific research in the field of sports science and physical education. Unscientific and scientific ways of solving a problem: the steps involved in the scientific methods; | Presentation, discussion, case studies and exercises. Interactive course | 2 |
| 2. General organization of research. | | 2 |
| 3. Types of scientific research used in physical education, sports and physical therapy. Examples of types of research | | 2 |
| 4. Research literature: sources of literature; where we find the specialized literature; literature analysis; literature review. | | 2 |
| 5. Probabilistic and non- probabilistic sampling | | 2 |

| | | |
|--|--|-----------|
| techniques | | |
| 6. Data collection techniques. The concept of measurement in physical education and sports: techniques of measurement of motor characteristics; actographic techniques; photographic image processing and video recording. | | 4 |
| 7. Data analysis and interpretation: trend parameters central; associations between variables; comparing environments. | | 4 |
| 8. APA style writing. | | 2 |
| 9. Ethics in scientific research. Improper conduct in research | | 4 |
| Total | | 24 |

Bibliography

1. American Psychological Association. (2013). *Publication Manual of the American Association of Psychology - 6th Edition* . Bucharest: Rentrop & Stratan Publishing House
2. Aslam, C., Moraru, C., F., Paraschiv R. (2018). *Course in dentistry and academic integrity* . Bucharest: National University of Arts
3. Epuran, M. (2005). *Research methodology of body activities*. Fest Publishing House: Bucharest
4. Hanțiu, I. (2018). *Techniques for studying human movement*. Course notes
5. Howitt, D. Cramer, D. (2010). *Introduction to SPSS for psychology* . POLIROM Publishing House
6. Marrow J. Jakson, A. Disch, J. Mood, D. (2000). *Measurement and Evaluation in Human Performance*. United States: Human Kinetics
7. The Parliament of Romania. (2011). *Law no. 206/2004 from 27/05/2004 Version updated on 04/11/2011 on good conduct in scientific research, technological development and innovation* . Regulation published in the Official Gazette, Part I no. 786 of 04/11/2011.

| 8.2 Seminars / laboratory classes | Teaching methods | Comments |
|--|--|-----------|
| 1. Searching for specialized literature and reviewing articles with topics similar to the project's own research | Research analysis, discussions and debates | 2 |
| 2. Descriptive analysis: trend parameters central, frequency. Exercises of calculating the parameters | Research analysis, discussions, exercises and debate | 2 |
| 3. Analysis of the relationships between variables – Pearson correlation. | Research analysis, discussions, exercises and debate | 2 |
| 4. Comparison of means: of a sample with an average date; two independent samples; pairs of samples. | Research analysis, discussions, exercises and debate | 2 |
| 5. Comparison of averages of more than two samples (ANOVA) | Research analysis, discussions, exercises and debate | 2 |
| 6. Ethics in scientific research: Examples of using the APA style in writing articles and doctoral theses | Research analysis, discussions and debates | 2 |
| Total | | 12 |

Bibliography:

1. Epuran, M. (2005). *Research methodology of body activities*. Fest Publishing House: Bucharest
2. Hanțiu, I. (2018). *Techniques for studying human movement*. Course notes
3. American Psychological Association. (2013). *Publication Manual of the American Association of Psychology - 6th Edition* . Bucharest: Rentrop & Stratan Publishing House

9. Aligning the contents of the discipline with the expectations of the epistemic community representatives, professional associations and standard employers operating in the program field

Content of the discipline respects, from a methodological point of view, the recommendations from the similar disciplines' steps at home and abroad on the steps to be taken in developing draft research, writing an article or a doctoral thesis. Also follow the recommendations from different guidelines for the elaboration of doctoral theses.

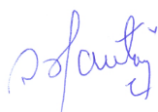
10. Examination

| Activity type | 10.1 Evaluation criteria | 10.2 Evaluation methods | 10.3 Weight in the final grade |
|--|--|--|--------------------------------|
| 10.4 Lectures | - level of knowledge of specialized terminology; - ability to use knowledge; | Written exam | 60% |
| 10.5 Seminars / laboratory classes | - ability to use the acquired knowledge; - ability to use the study techniques of the movement; | Discussions, answers to questions, laboratory work | 20% |
| | applying the techniques appropriate to the purpose in the own research project | Project draft | 20% |
| 10.6 Minimum performance standard | | | |
| -participation in at least 70% of the total course activities and seminars / laboratories; -knowledge of the basic elements of human movement study techniques: search and analysis of specialized literature; data collection; data analysis; writing scientific papers. | | | |

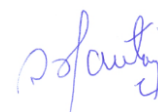
Date of issue

1.09.2021

Signature of the teacher responsible for lectures



Signature of the teacher responsible for seminars



Date of approval by the doctoral school council

09.09.2021

Signature of the doctoral school director