

KINEZIOLOGIJA V POLISTRUKTURNIH KOMPLEKSNIH ŠPORTIH

UČNI NAČRT PREDMETA/COURSE SYLLABUS

Predmet:	Kineziologija v polistrukturnih kompleksnih športih
Course title:	Kinesiology in Poly-structural Complex Sports
Članica nosilka/UL Member:	UL FŠ

Študijski programi in stopnja	Študijska smer	Letnik	Semestri	Izbirnost
Kineziologija, 3. stopnja		1.	1. ali 2.	da

Univerzitetna koda predmeta/University course code:	0076435
Koda učne enote na članici/UL Member course code:	

Predavanja /Lectures	Seminar /Seminar	Vaje /Tutorials	Klinične vaje /Clinical tutorials	Druge oblike študija /Other forms of study	Samostojno delo /Individual student work	ECTS
10	15			30	95	5

Nosilec predmeta/Lecturer:	prof. dr. Frane Erčulj; prof. dr. Marko Šibila
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Vrsta predmeta/Course type:	Izbirni/Elective
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Jeziki/Languages:	Slovenščina/Slovenian	

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Izpolnjevanje pogojev za vpis na doktorski študij Kineziologija

Prerequisites:

General conditions for enrolment into the Doctoral Programme of Kinesiology

Vsebina:

Tema: Značilnosti sistema športnega treniranja v polistrukturnih kompleksnih športih ter vidiki njegovega preučevanja v svetu in pri nas

Podteme:

- 1) Značilnosti podsistema prostorskih, časovnih, tehničnih in taktičnih razsežnosti polistrukturnih kompleksnih športov.
- 2) Značilnosti podsistema delnega ali celotnega potenciala in tekmovalne uspešnosti igralcev, tipov igralcev in moštev v polistrukturnih kompleksnih športih.
- 3) Značilnosti podsistema začetnega vključevanja, selekcioniranja in specializacije igralcev v polistrukturnih kompleksnih športih.

Content (Syllabus outline):

Topic: Characteristics of the sport training system in poly-structural complex sports and the aspects of their study in the in an international environment and in Slovenia.

Subtopic:

- 1) Characteristics of the subsystem of spatial, temporal, technical and tactical facets of the poly-structural complex sports and the aspects of its study.
- 2) Characteristics of the subsystem of partial or full potential and competitive performance of male and female athletes in poly-structural complex sports and the aspects of its study.
- 3) Characteristics of the subsystem of initial integration, selection and specialisation of male and

4) Značilnosti podistema upravljanja vadbenega procesa v polistrukturnih kompleksnih športih. V vseh podtemah bodo študenti seznanjeni z raziskovalnimi problemi, ki so povezani s posameznimi podtemami, z vidiki njihovega preučevanja, z izbranimi specialnimi znanstveno-raziskovalnimi tehnologijami in metodami ter z načini prenosa izsledkov v športno prakso.	female athletes in poly-structural complex sports and the aspects of its study. 4) Characteristics of the subsystem of the training process management in poly-structural complex sports and the aspects of its study. In all sub-topics, students will be acquainted with research problems related to individual sub-topics, with aspects of their study, with selected special scientific-research technologies and methods, and with the means of transferring results into sport practice.
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Temeljna literatura in viri/Readings:

1. Mohorič, U., Šibila, M., Štrumbelj, B. (2021). Positional differences in some physiological parameters obtained by the incremental field endurance test among elite handball players. *Kinesiology : international scientific journal of kinesiology and sport*.
2. Erčulj, F., Zovko, V. (2020). *Znanost o metu na koš*. Ljubljana: Fakulteta za šport, Inštitut za šport.
3. Erčulj, F. in Zovko, V. (2022). *Basketball Shooting: A Science-based Approach to Coaching*. Hamburg: Verlag Dr. Kovač.
4. Podmenik, N., Supej, M., Debevec, H., Erčulj, F. (2021). Common movement patterns of the jump shot while increasing the distance from the basket in elite basketball players. *Journal of Human Kinetics*. 2021, vol. 78, str. 29-39.
5. Kambič, T., Stepišnik Krašovec, F., Erčulj, F., Štirn, I. (2021). Biomechanical adjustments of the basketball jump shot performed over differently high opponents. *Journal of Human Kinetics*. 2022, vol. 83, str. 23-28.
6. Sirnik, M., Erčulj, F., Rošker, J. (2022). Research of visual attention in basketball shooting: A systematic review with meta-analysis. *International journal of sports science & coaching*. str. 1-16.
7. Bračič, M., Erčulj, F., Kovačič, T. (2025). Short-term effectiveness of a physiotherapy programme in young athletes with Osgood-Schlatter syndrome. *Physical Activity Review*. vol. 13, no. 2, str. 22-34.
8. Zadnik, U., Erčulj, F., Štirn, I. (2025). Structural analysis of assists in top men's basketball teams. *Journal of Human Kinetics*, str. 1-12.
9. Jutreša, R., Štrumbelj, E., Erčulj, F., Supej, M., Marković, M. (2024). The reliability of basketball shooting tests with binary outcomes. *Journal of sports sciences*, str. 1-9.
10. Filippi, A. (2011). *Shot Like the Pros. The road to a successful shooting technique*. Chicago, IL: Triumph books.
11. Stone, N. (2007). *Physiological response to sport-specific aerobic interval training in high school male basketball players*. Auckland, IN: Auckland University of Technology, School of Sport and Recreation.
12. Fontanella, J. J. (2006). *The physics of basketball*. Baltimore: The Johns Hopkins University Press.
13. Kim J., James N., Parmar N., Ali B and Vučković G. (2019). The Attacking Process in Football: A Taxonomy for Classifying How Teams Create Goal Scoring Opportunities Using a Case Study of Crystal Palace FC. *Front. Psychol.* 10:2202. doi: 10.3389/fpsyg.2019.02202.
14. Jongwon Kim, Nic James, Nimai Parmar, Besim Ali & Goran Vučković (2019). Determining unstable game states to aid the identification of perturbations in football, *International Journal of Performance Analysis in Sport*, 19:3, 302-312, DOI: 10.1080/24748668.2019.1602439
15. Skazalski, C., Whiteley R., Bahr, R. (2018). High jump demands in professional volleyball-large variability exists between players and player positions. *Scand J Med Sci Sports*.
16. Damji, F., MacDonald, K., Hunt, M., A., Taunton, J., Scott, A. (2021). Using the VERT wearable device to monitor jumping loads in elite volleyball athletes. *Plos One*.
17. Komi, P. V. (2003). *Strength and Power in Sport (Second Edition)*. Oxford: Blackwell Science.
18. Baechle, T., R., Earle, R., W. (2008). *Essentials of strength training and Conditioning*. Champaign, IL: Human Kinetics.
19. Doktorske disertacije avtorjev, ki so preučevali probleme v polistrukturnih kompleksnih športih.
20. Manchado, C., Tortosa-Martinez, J., Marcos-Jorquera, D., Gilart-Iglesias, V., Pueo, B., and Chirisa-Rios, L.J. (2024). Monitoring external load during real competition in male handball players through big data analytics: differences by playing positions. *Kinesiology* 56(1):12-23.

21. Van den Tillaar, R., Zondag, A. in Cabri, J. (2013). Comparing performance and kinematics of throwing with a circular and whip-like wind up by experienced handball players. *Scandinavian Journal of Medicine and Science in Sports*. Str. 1-8
22. Bishop, C., Lake, J., Loturco, I., Papadopoulos, K., Turner, A. and Read, P. (2018). Interlimb asymmetries: the need for an Individual approach to data analysis. *Journal of Strength and Conditioning Research* 00/00. Str. 1-7
23. Soto, D., Reynoso-Sánchez, L.F., García-Herreroc, J.A., Gómez-López, M. and Carcedo R.J. (2022). Coach competence, justice, and authentic leadership: A model for athlete satisfaction. *International Journal of Sports Science & Coaching*. Str. 2-24
24. Uhl, E. in König, S. (2025). Forschungsprogramm bilaterales training im kinder und jugend handball. *Leistungssport*, 3, str. 31-37
25. Zapardiel, J. C., Asín-Izquierdo, I., Manchado, C., Marcos-Jorquera, D., Gilart-Iglesias, V., & Lozano, D. (2024). Competitive profile analysis according to playing positions of female handball players during the European Championship 2020. *International Journal of Performance Analysis in Sport*, 24(6), 568–586. <https://doi.org/10.1080/24748668.2024.2333655>
26. Holm, P. A. T., & Randers, M. B. (2025). Internal and external training and match load quantification during in-season and pre-season in professional highly trained male team handball players. *International Journal of Performance Analysis in Sport*, 1–14. <https://doi.org/10.1080/24748668.2025.2518889>
27. Köhler, H.P., Vetter, S. und Witt, M. (2024). Entwicklung und Evaluation einer exzentrischen Krafttrainingsintervention für das Schultergelenk bei Handballern Hans-Peter Köhler, Sebastian Vetter und Maren Witt. *BISp-Forschungsförderung 2023/24*. str. 39-45.

Cilji in kompetence:

Uspodobiti študente za prepoznavo raziskovalnih problemov z možnostjo aplikacije v prakso, izvedbo raziskave (eksperimenta) in oblikovanjem znanstvenega dela (članka) v polistrukturnih kompleksnih športih.

Objectives and competences:

To educate students to identify research problems with the possibility of application in practice, conducting research (experiment) and designing a scientific work (article) in poly-structural complex sports.

Predvideni študijski rezultati:

Znanje in razumevanje:
Spoznati in razumeti pomen znanstveno-raziskovalnega dela v polistrukturnih kompleksnih športih in uporabo le-tega v trenerskem delu oz. trenažnem procesu športnikov.

Intended learning outcomes:

Knowledge and understanding:
Recognize and understand the importance of scientific research in poly-structural complex sports and the use thereof in training process of athletes.

Metode poučevanja in učenja:

Predavanja, seminarji, individualno/mentorsko delo s študenti.

Learning and teaching methods:

Lectures, seminars, individual/mentoring work with students.

Načini ocenjevanja:

Način (ustno izpraševanje, naloge, projekt):

Ocena kakovosti znanstveno-raziskovalne seminarske naloge in njenega zagovora.

Delež/Weight

100 %

Assessment:

Type (examination, oral, coursework, project):

Preparation and presentation of a scientific - type seminar work.

Ocenjevalna lestvica:

5 – 10, pri čemer velja, da je pozitivna ocena od 6- 10

Grading system:

5–10, where a score of 6–10 is considered a passing grade

Reference nosilca/Lecturer's references:

Prof. dr. Erčulj:

Erčulj, F., Zovko, V. (2020). Znanost o metu na koš. Ljubljana: Fakulteta za šport, Inštitut za šport.
Erčulj, F. in Zovko, V. (2022). Basketball Shooting: A Science-based Approach to Coaching. Hamburg: Verlag Dr. Kovač.

Sirnik, M., Erčulj, F., Rošker, J. (2022). Research of visual attention in basketball shooting: A systematic review with meta-analysis. *International journal of sports science & coaching*. str. 1-16.

Jutreša, R., Štrumbelj, E., Erčulj, F., Supej, M., Marković, M. (2024). The reliability of basketball shooting tests with binary outcomes. *Journal of sports sciences*, str. 1-9.

Prof. dr. Šibila:

Pori, P., Martinc, D., Šibila, M., Štirn, I. (2023). The comparison of the unilateral and bilateral resistance training in young handball players. *Sport sciences for health*, vol. 19, issue 2, str. 691-700.

Landuré, P., Seong-ok, O., Šibila, M., Belmessaoud, S., Späte, D. (2024). Attack-oriented play dominates but active defending continues to be key for success : general analysis of the 2023 IHF Women's World Championship in Denmark, Norway and Sweden. *World handball magazine*. št. 1, str. 6-61.

Mohorič, U., Šibila, M. in Štrumbelj, B. (2021). Positional differences in some physiological parameters obtained by the incremental field endurance test among elite handball players. *Kinesiology : international scientific journal of kinesiology and sport*. str. 3-11

Corvino, M., Tessitore, A., Minganti, C. in Šibila, M. (2014). Effect of court dimensions on players` external and internal load during small-sided handball games. *Journal of Sports Science and Medicine*. str. 297-303