

UČNI NAČRT PREDMETA / COURSE SYLLABUS	
Predmet:	Šport in spretnosti 21. stoletja
Course title:	Sport and 21st Century Skills

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Psihosocialno svetovanje, druga Psychosocial counselling, master, second	Psihosocialno svetovanje v športu Psychosocial counselling in sport	Drugi Second	Tretji Third

Vrsta predmeta / Course type	Obvezni / Obligatory
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Univerzitetna koda predmeta / University course code:	ŠS21S / S21CS
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Predavanja Lectures	Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
20		20			80	4

Nosilec predmeta / Lecturer:	doc. dr. Jana Krivec / Assist. Prof. Jana Krivec, Ph.D
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Jeziki / Languages:	Predavanja / Lectures: Vaje / Tutorial:	Slovensko / Slovenian, Angleško / English Slovensko / Slovenian, Angleško / English
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Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:  Izpolnjeni pogoji za vpis v 2. letnik magistrskega študija.	Prerequisites:  The conditions for enrollment into the 2nd year of MA.
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**Vsebina:**

- spremnosti 21ega stoletja
- sistematično razmišljanje in odločanje
- stili odločanja
- zaznavanje rizika
- koncentracija
- kritično razmišljanje
- komunikacijske spremnosti
- ustvarjalnost in fleksibilnost
- reševanje problemov in razpoznavanje vzorcev
- vztrajnost in odloženo nagrajevanje
- sodelovanje
- tehnološke spremnosti z digitalno in informacijsko pismenostjo
- pristop premišljeno usmerjene vadbe

**Content (Syllabus outline):**

- 21st century skills
- systematic thinking and decision making
- decision making styles
- risk perception
- concentration
- critical thinking
- communication skills
- creativity and flexibility
- problem solving and pattern recognition
- perseverance and delayed reward
- collaboration
- technology skills and digital and information literacy
- deliberate practice approach

**Temeljni literatura in viri / Readings:****Obvezna literatura:**

ECCLES, David W.; LEONE, Emma J.; WILLIAMS, A. Mark. *Deliberate practice: What is it and how can I use it?*. Journal of Sport Psychology in action, 2022, 13.1: 16-26.

SCHMIDT, Sascha L. (ed.). *21st century sports: How technologies will change sports in the digital age*. Springer Nature, 2020.

KRIVEC, Jana. *Improve your life by playing a game : learn how to turn your life activities into lifelong skills!*. Landegem: Thinkers Publishing, 2021.

ANDERS ERICSSON, K. *Deliberate practice and acquisition of expert performance: a general overview*. Academic emergency medicine, 2008, 15.11: 988-994.

**Dopolnilna literatura:**

NAYLOR, Adam H.; YEAGER, John M. A 21st-century framework for character formation in sports. Peabody Journal of Education, 2013, 88.2: 212-224.

KRIVEC, Jana. Chess as a tool for developing 21st century skills with a deliberate practice approach. V: FOMICHOV, Vladimir (ur.), FOMICHOVA, Olga S. (ur.). *Kognitonika = Cognitronics : Informacijska družba - IS 2022 = Information Society - IS 2022 : zbornik 25. mednarodne multikonference = proceedings of the 25th International Multiconference : zvezek D = volume D : 10. oktober 2022, 10 October 2022, Ljubljana, Slovenija*. Ljubljana: Institut "Jožef Stefan", 2022. Str. 27-30.

WYLLEMAN, Paul, et al. *A developmental perspective on transitions faced by athletes. Developmental sport and exercise psychology: A lifespan perspective*. 2004, 507-527.

**Cilji in kompetence:**

Cilj predmeta je pridobitev poglobljenega znanja, ki omogoča strokovno in znanstveno osnovano razvijanje športnika z upoštevanjem pomena spretnosti 21 stoletja tako za namen poučevanja, aktivno profesionalno kariero, kot tudi za čas po karieri.

Učna enota prispeva k razvoju naslednjih splošnih in predmetnospecifičnih kompetenc:

- avtonomnost v strokovnem delu
- sposobnost povezovanja znanja in obvladovanja kompleksnosti, s katero se srečujejo pri strokovnem delu
- sposobnost uporabe znanja v praksi in izvirnega, kreativnega reševanja problemov v novih ali neobičajnih kontekstih
- sposobnost poglobljene kritične analize, sinteze in predvidevanja rešitev ter posledic
- razvoj komunikacijskih sposobnosti in spretnosti, obvladovanje (sodelovanje, koordiniranje, vodenje, soustvarjanje) komunikacije v mednarodnem okolju, tudi z eksperti na drugih področjih
- sposobnost povezovanja znanja in obvladovanja kompleksnosti, s katero se srečujejo pri strokovnem delu
- zmožnost učenja tudi v smislu samostojno usmerjanega strokovnega izpopolnjevanja
- zmožnost avtonomno uporabljati vire za učenje z demonstracijo spretnosti upravljanja in integriranja informacij
- zmožnost uspešno delati s skupino in/ali kot kosvetovalci, reflektirati učinkovitost skupinskega dela ter jo na podlagi rezultatov refleksije izboljševati

**Objectives and competences:**

The objective of the course is to acquire in-depth knowledge that enables the professional and scientifically based development of an athlete by taking into account the importance of 21st century skills for a pedagogical perspective, active professional career and for the time after the career.

Learning unit contribute to the development of the following generic and subject specific competences:

- autonomy in professional work
- the ability to connect knowledge and manage complexity faced in professional work
- the ability to apply knowledge in practice and innovative, creative problem solving in new or unusual contexts
- the ability of critical analysis, synthesis and prediction of solutions and consequences
- the development of communication skills, capability to communicate (cooperation, coordination, leadership, co-creation) in international environment and with experts on various fields
- the ability to connect knowledge and manage complexity faced in professional work
- the ability to learn in terms of self-directed professional development
- the ability to autonomously use resources for learning by demonstrating management skills and integration of information
- the ability to successfully work with groups and/or as co-therapist reflect the effectiveness of group work and improve it based on the results of the reflection

**Predvideni študijski rezultati:**

- demonstrirati splošno raven razumevanja teoretičnih in strokovnih načel psihološkega svetovanja v športu
- avtonomno uporabljati vire za učenje konkretnih vsebin
- uporabljati kritično refleksijo in redno intervizijo ter supervizijo za svoj študijski in osebni razvoj
- sodelovanje z drugimi v trenerskem timu za oblikovanje možnih rešitev oz. intervencij
- avtomomno se učiti in razvijati novo znanje skozi individualne izkušnje dela s športniki
- delati kooperativno z drugimi

**Intended learning outcomes:**

- demonstrate the general level of understanding of the theoretical and applied principles of psychological counselling in sport
- autonomously use resources for learning specific content
- use critical reflection and regular supervision and intervision for their academic and personal development
- collaboration with others inside coach expert team to create possible solutions and interventions
- autonomously learn and develop knowledge through individual experience of work with athletes
- to work cooperatively with others

**Metode poučevanja in učenja:**

- predavanja z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov)
- vaje, ki temeljijo na izkušenjskem, sodelovalnem in problemskem učenju (samostojno učenje, diskusija, razlaga, opazovanje, timsko delo, študija primera, metode kritičnega branja in pisanja, igra vlog, prikaz video-posnetkov, sodelovalno učenje)
- uporaba spletne učilnice oziroma drugih sodobnih IKT orodij
- individualne in skupinske konzultacije (diskusija, dodatna razlaga, obravnava specifičnih vprašanj)

**Learning and teaching methods:**

- lectures with students' active participation (lecture, discussion, questions, case studies, problem solving)
- exercises that are based on experiential, collaborative and problem-based learning (self-study, discussion, lecture, observation, teamwork, case study, methods of critical reading and writing, role play, displaying video clips, cooperative learning)
- use of online classroom or other contemporary ICT tools
- individual and group consultations (discussion, additional explanation, dealing with specific questions)

Delež (v %) /

**Načini ocenjevanja:**

Weight (in %)

**Assessment:**

Pisni izpit.	100	Written exam.  Grading - in accordance with the Rules of verifying and assessing knowledge.
Ocenjevalna lestvica – skladno s Pravilnikom o preverjanju in ocenjevanju znanja.		

**Reference nosilca / Lecturer's references:**

Predavateljica je več let aktivno sodelovala v vrhunskem športu kot članica Slovenske nacionalne ekipe v šahu. Več let je zaposlena v procesu visokošolskega izobraževanja. Sodeluje tudi z Inštitutom Jožef Stefan na področju umentne inteligence. / The lecturer actively participated in semi professional sport for many years as a member of the Slovenian national chess team. She has been employed in the process of higher education for several years. She collaborates with Jožef Stefan Institute on the field of artificial intelligence.

**Glavne reference/Mail references:**

KRIVEC, Jana. *Improve your life by playing a game: learn how to turn your life activities into lifelong skills!* Landegem: Thinkers Publishing, 2021. 189 str., ilustr. ISBN 978-94-6420-102-4.

KRIVEC, Jana, BRATKO, Ivan, GUID, Matej. Identification and conceptualization of procedural chunks in chess. *Cognitive systems research*. 2021, vol. 69, str. 22-40, ilustr. ISSN 1389-0417. <https://doi.org/10.1016/j.cogsys.2021.05.001>, DOI: 10.1016/j.cogsys.2021.05.001.

KRIVEC, Jana, GUID, Matej. The influence of context on information processing. *Cognitive processing*. May 2020, vol. 21, iss. 2, str. 167-184, ilustr. ISSN 1612-4782. DOI: 10.1007/s10339-020-00958-8.

GUID, Matej, MOŽINA, Martin, KRIVEC, Jana, SADIKOV, Aleksander, BRATKO, Ivan. Learning positional features for annotating chess games: a case study. V: HERIK, H. Jaap van den (ur.), et al. *Computers and games: 6th international conference*, CG 2008, Beijing, China, September 29 - October 1, 2008: proceedings. Berlin; Heidelberg; New York: Springer, cop. 2008. Str. 192-204, ilustr. Lecture notes in computer science, LNCS 5131. ISBN 978-3-540-87607-6, ISBN 3-540-87607-3. ISSN 0302-9743.

MOŽINA, Martin, GUID, Matej, KRIVEC, Jana, SADIKOV, Aleksander, BRATKO, Ivan. Fighting knowledge acquisition bottleneck with argument based machine learning. V: GHALLAB, Malik (ur.). *ECAI 2008: proceedings*. Amsterdam ... [etc.]: IOS Press, cop. 2008. Str. 234-238, ilustr. Frontiers in artificial intelligence and applications, vol. 178. ISBN 978-1-58603-891-5. ISSN 0922-6389.

KRIVEC, Jana, POPOVIĆ, Tjaša. Vpliv interakcije in vzgojnega stila na koncentracijo predšolskih otrok. *Pedagoška obzorja : časopis za didaktiko in metodiko*. 2020, letn. 35, [št.] 3/4, str. 100-116, graf. prikazi. ISSN 0353-1392.

GAMS, Matjaž, KRIVEC, Jana. Demographic analysis of fertility using data mining tools. *Informatica: an international journal of computing and informatics*. [Tiskana izd.]. 2008, vol. 32, no. 2, str. 147-156. ISSN 0350-5596.

SADIKOV, Aleksander, MOŽINA, Martin, GUID, Matej, KRIVEC, Jana, BRATKO, Ivan. Automated chess tutor. V: HERIK, H. Jaap van den (ur.), CIANCARINI, Paolo (ur.), DONKERS, H. H. L. M. Jeroen (ur.). *Computers and games: 5th international conference*, CG 2006, Turin, Italy, May 29-31, 2006 : revised papers. Berlin; Heidelberg; New York: Springer, cop. 2007. Str. [13]-25, ilustr. Lecture notes in computer science, LNCS 4630, LNCS sublibrary, SL 1, Theoretical computer science and

general issues. ISBN 978-3-540-75537-1, ISBN 3-540-75537-3. ISSN 0302-9743.

GAMS, Matjaž, KRIVEC, Jana. *Intelligent systems already influence our lives. Transactions on internet research*. [Online ed.]. 2007, vol. 3, no. 2, str. 16-19.

KRIVEC, Jana. Chess as a tool for developing 21st century skills with a deliberate practice approach. V: FOMICHOV, Vladimir (ur.), FOMICHOVA, Olga S. (ur.). *Kognitonika = Cognitonics: Informacijska družba - IS 2022 = Information Society - IS 2022: zbornik 25. mednarodne multikonference = proceedings of the 25th International Multiconference: zvezek D = volume D: 10. oktober 2022, 10 October 2022, Ljubljana, Slovenija*. Ljubljana: Institut "Jožef Stefan", 2022. Str. 27-30. Informacijska družba. ISBN 978-961-264-244-0. ISSN 2630-371X.

GUID, Matej, BRATKO, Ivan, KRIVEC, Jana. An experiment in students' acquisition of problem solving skill from goal-oriented instructions. V: *ComputationWorld 2012: July 22-27, 2012, Nice, France*. [S. l.]: IARIA, cop. 2012. Str. 159-164.

MOŽINA, Martin, GUID, Matej, SADIKOV, Aleksander, GROZNIK, Vida, KRIVEC, Jana, BRATKO, Ivan. Conceptualizing procedural knowledge targeted at students of different skill levels. V: BAKER, Ryan S. J. D. (ur.), MERCERON, Agathe (ur.), PAVLIK, Philip I. (ur.). *Educational data mining 2010*. [S. l.: s. n., 2010. Str. 309-310, ilustr. ISBN 978-0-615-37529-8.

IQBAL, Azlan, GUID, Matej, COLTON, Simon, KRIVEC, Jana, AZMAN, Shazril, HAGHIGHI, Boshra. *The digital synaptic neural substrate: a new approach to computational creativity*. [S. l.]: Springer, cop. 2016. XV, 119 str., ilustr. Springer briefs in cognitive computation. ISBN 978-3-319-28078-3, ISBN 978-3-319-28078-3. ISSN 2212-6023.

KRIVEC, Jana. Cognitive processes and information technology in education. V: RONČEVIĆ, Borut (ur.), TOMŠIČ, Matevž (ur.). *Information society and its manifestations: economy, politics, culture*. Frankfurt am Main [etc.]: PL Academic Research, cop. 2017. ISBN 978-3-631-7035-71. DOI: 10.3726/b10694.