



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Okoljska pismenost in vzgoja za trajnostni razvoj
Course title:	Environmental literacy and education for sustainable development

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Doktorski študij Ekološke znanosti, 3. stopnja		1. ali 2.; 1st or 2nd	1.- 4.; 1st-4th
Doctoral Study Ecological Sciences, 3rd degree			

Vrsta predmeta / Course type: Izbirni/Elective

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
5	25				150	6

Nosilec predmeta / Lecturer: izr. prof. dr. Andreja Špernjak

Jeziki / Languages:	Predavanja / Lectures:	slovenščina / Slovene
	Vaje / Tutorial:	slovenščina / Slovene

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	Prerequisites:
Temeljna znanja iz predmetnih didaktik.	Basic knowledge from subject didactics.

Vsebina: V vsebini predmeta obravnavamo ključne koncepte okoljske pismenosti in njihov pomen za sodobne izobraževalne prakse. Poudarek je na razumevanju medsebojnih vplivov med človekom in okoljem, razvijanju kritične zavesti o okoljskih izzivih ter spodbujanju aktivnega državljanstva v duhu trajnostnega razvoja. Sledi kritičen razmislek o aktivnejšem prenosu	Content (Syllabus outline): The course content deals with key concepts of environmental education and their significance for today's educational practice. The focus is on understanding the interactions between humans and the environment, developing a critical awareness of environmental challenges and promoting active citizenship for sustainable development. This is followed by a critical reflection on a more active transfer of
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znanja na primarni, sekundarni in terciarni nivo izobraževanja.

knowledge at primary, secondary and tertiary level.

Temeljni literatura in viri / Readings:

- UNESCO. (2017). *Education for sustainable development goals: Learning objectives*. United Nations Educational, Scientific and Cultural Organization. <https://unesdoc.unesco.org/ark:/48223/pf0000247444> .
- Zorko, T., & Špernjak, A. Dodana vrednost učnega okolja : "žive stene" v učilnicah. V: Ploj Virtič, M. (ur.). *Vloga predmetnega učitelja v sodobni šoli*. 1. izd. Maribor: Univerza v Mariboru, Univerzitetna založba, 2023. Str. 69-88, <https://press.um.si/index.php/ump/catalog/book/749> , DOI: 10.18690/um.fnm.1.2023.3

Dodatna literatura:

- Špernjak, A., Puhmeister Jug, A., Šorgo, A. Public opinions and knowledge about microorganisms. *Research in science & technological education*. 2023, vol. 41, no. 2, str. 800-818. DOI: 10.1080/02635143.2021.1952407.
- Špernjak, A., & Rupar, N. Fieldwork as a scientific workshop for schoolchildren during the summer vacations. V: GÓMEZ CHOVA, Louis (ur.). *ICERI 2023 : 16th International Conference of Education, Research and Innovation : 13-15 November, 2023, [Seville, Spain]*. Valencia: IATED Academy, 2023. Str. 3538-3545, tabele. <https://library.iated.org/view/SPERNJAK2023FIE>, DOI: 10.21125/iceri.2023.0913
- Cox, R., & Pezzullo, P. (2016). *Environmental communication and the public sphere* (4th ed.). SAGE Publications.
- Higgitt, D. (Ed.). (2021). *Environmental literacy: Towards a shared understanding for higher education*. Springer. <https://doi.org/10.1007/978-3-030-72309-4>
- Kuhar, M., Čepič, M., & Ferjanič, M. (Eds.). (2020). *Vzgoja in izobraževanje za trajnostni razvoj*. Založba ZRS.
- Orr, D. W. (2004). *Earth in mind: On education, environment, and the human prospect* (Rev. ed.). Island Press.

Cilji in kompetence:

- Razviti razumevanje okoljske pismenosti kot kompetence prihodnosti.
- Povezati globalne okoljske izzive z izobraževalnimi cilji.
- Analizirati in kritično ovrednotiti obstoječe pedagoške pristope k okoljskim vsebinam.
- Spodbujati razvoj didaktičnih strategij, ki vodijo k trajnostnemu ravnanju.
- Kritična analiza in interpretacija okoljskih informacij.
- Razvijanje sposobnosti za vključevanje okoljskih tem v pedagoški kontekst.
- Razvoj kompetenc za aktivno državljanstvo in trajnostno delovanje.

Objectives and competences:

- Developing an understanding of environmental competence as a competence of the future.
- Linking global environmental challenges with educational goals.
- Analyzing and critically evaluating existing pedagogical approaches to environmental content.
- Promoting the development of didactic strategies that lead to sustainable behavior.
- Critically analyse and interpret environmental information.
- Develop the ability to integrate environmental issues into the educational context.
- Develop competences for active citizenship and sustainable action.

Predvideni študijski rezultati:

Znanje in razumevanje:

- definira in pojasni koncepte okoljske pismenosti in trajnostnega razvoja,
- analizira primere dobre prakse iz okoljske vzgoje doma in v tujini,
- razvije didaktični projekt, ki vključuje okoljske teme,
- ovrednoti vpliv izobraževanja na oblikovanje okoljske zavesti.

Intended learning outcomes:

Knowledge and understanding:

- define and explain the concepts of environmental education and sustainable development,
- analyze examples of good practice in environmental education at home and abroad,
- develop a didactic project that includes environmental topics,
- evaluate the impact of education on the development of environmental awareness.

Metode poučevanja in učenja:

Predavanja
Projektno delo

Learning and teaching methods:

Lectures
Project work

Delež (v %) /

Načini ocenjevanja:

Weight (in %)

Assessment:

Seminarska naloga

100

Seminar paper

Reference nosilca / Lecturer's references:

ŠPERNJAK, Andreja, PUHMEISTER JUG, Anja, ŠORGO, Andrej. Public opinions and knowledge about microorganisms. *Research in science & technological education*. 2023, vol. 41, no. 2, str. 800-818. DOI: 10.1080/02635143.2021.1952407.

MARIČIĆ, Mirjana, ANĐIĆ, Branko, MUMCU, Filiz, ROKOS, Lukáš, VONDRUŠKA, Jan, WEINHANDL, Robert, LAVICZA, Zsolt, ŠPERNJAK, Andreja. Evaluating the quality of technology integration across seven European countries with the ICAP technology scale. *Journal of computers in education*. 2024, [38] str. <https://doi.org/10.1007/s40692-024-00341-y>

ŠPERNJAK, Andreja, RUPAR, Nina. Is digital technology necessary in practical field work in biology?. V: ABERŠEK, Boris (ur.), COTIČ, Mara (ur.). *Challenges and transformation of education for 21st century schools*. Newcastle-upon-Tyne (UK): Cambridge Scholars Publishing, 2024. Str. 147-172.

ŠPERNJAK, Andreja, RUPAR, Nina. Fieldwork as a scientific workshop for schoolchildren during the summer vacations. V: GÓMEZ CHOVA, Louis (ur.). *ICERI 2023 : 16th International Conference of Education, Research and Innovation : 13-15 November, 2023, [Seville, Spain]*. Valencia: IATED Academy, 2023. Str. 3538-3545, tabele. <https://library.iated.org/view/SPERNJAK2023FIE>, DOI: 10.21125/iceri.2023.0913

ZORKO, Tadej, ŠPERNJAK, Andreja. Dodana vrednost učnega okolja : "žive stene" v učilnicah. V: PLOJ VIRTIČ, Mateja (ur.). *Vloga predmetnega učitelja v sodobni šoli*. 1. izd. Maribor: Univerza v Mariboru, Univerzitetna založba, 2023. Str. 69-88, <https://press.um.si/index.php/ump/catalog/book/749> , DOI: 10.18690/um.fnm.1.2023.3