



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Praktično usposabljanje za poučevanje biologije 1
Course title:	Pedagogical practice for biology 1

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Enovit magistrski študijski program druge stopnje Predmetni učitelj	/	3	6
Five-year master's degree program Subject Teacher	/		

Vrsta predmeta / Course type Obvezni / Obligatory

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Lab. vaje Laboratory work	Terenske vaje Field work	Samost. delo Individ. work	ECTS
	3		8		109	4

Nosilec predmeta / Lecturer: Andreja Špernjak

Jeziki /	Predavanja / Lectures:	slovenski / slovene
Languages:	Vaje / Tutorial:	slovenski / slovene

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

Osnovna znanja iz pedagogike in psihologije;
prisotnost na predavanjih, seminarjih in vajah iz predmeta Didaktika biologije

Prerequisites:

Basic skills in pedagogy and psychology;
attendance at lectures, seminars and laboratory work for subject Didactics of Biology

Vsebina:

Seminar:

- organizacija vzgojno – izobraževalnega dela v osnovni šoli;
- šolska dokumentacija, predmetnik in učni načrti za Biologijo v OŠ in Naravoslovje 6 in 7;
- organizacija strnjene pedagoške prakse;
- spoznavanje dokumentacije o opazovanju, spremljanju, izvajanju in ocenjevanju izvedenih dejavnosti na dvotedenski strnjeni pedagoški praksi v osnovni šoli.
- načrtovanje in izvedba pisne priprave za pouk;
- pripravljane na izvedbo nastopa;
- dnevnik pedagoške prakse;

Content (Syllabus outline):

Seminaire:

- organization of the education in primary school;
- school documentation and subject curricula for technology education;
- organization of pedagogical practice;
- the documentation of the observation, monitoring, implementation and evaluation of the activities in the continuous two-week teaching practice in primary school.
- planing of educational process – preparing for class appearances;
- diary of pedagogical practice;

<ul style="list-style-type: none"> • vrednotenje in refleksija pedagoške prakse. <p><u>Laboratorijske vaje:</u></p> <ul style="list-style-type: none"> • izvedba nastopov v OŠ; • izvedba pedagoške prakse. <p><u>Samostojno delo:</u></p> <ul style="list-style-type: none"> • pisne priprave za izvedbo pouka; • spoznavanje pedagoške dokumentacije (letna in dnevna priprava, dnevnik, redovalnica); • delo in organiziranost oddelčne in šolske skupnosti; • organiziranost interesnih dejavnosti, šolskih projektov, društev in aktivov učiteljev; • izvedba učnih ur (nastopov) in hospitacij na strnjeni pedagoški praksi na osnovni šoli. • Pisanje dnevnika pedagoške prakse <p>Nastopi v šoli med letom:</p> <ul style="list-style-type: none"> - 2 nastopa v osnovni šoli, - 3 hospitacije učiteljev (vzorčni nastopi), - najmanj 6 hospitacij kolegov študentov med letom. <p>Pedagoška praksa z nastopi, hospitacijami in drugimi pedagoškimi obveznostmi (1 teden):</p> <p>v osnovni šoli, 4 nastopi, 6 hospitacij učitelja, seznanitev z drugim delom učitelja na šoli (vodenje pedagoške dokumentacije, udeležba na roditeljskem sestanku ali govorilni uri, seznanitev z delom strokovnega aktiva, udeležba na pedagoški konferenci, seznanitev z delom razrednika, pomoč mentorju pri drugem delu, določenem z zakonodajo in letnim delovnim načrtom šole).</p>	<ul style="list-style-type: none"> • evaluation of class appearances and pedagogical class practice. <p><u>Lab. work:</u></p> <ul style="list-style-type: none"> • practical instructions in lower secondary school • pedagogical school work at school. <p><u>Individual work:</u></p> <ul style="list-style-type: none"> • written lesson plans • to learn about pedagogical documents (annual and daily preparation for educational process, school diary); • work and organization of departmental and school community; • the structure of interest activities, school projects, associations and teacher groups; • realization of class appearances and pedagogical class practice in primary school. <ul style="list-style-type: none"> • writing of diary of pedagogical practice <p>Pedagogical class appearances in school:</p> <ul style="list-style-type: none"> • 2 appearances in elementary school, • 3 observations (teachers), • at least 6 observations (students). <p>Pedagogical practice with class appearances (instructions), observations and other pedagogical obligations (1 week):</p> <p>in elementary school, 4 class appearances, 6 observations (teachers), other pedagogical obligations.</p>
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Temeljni literatura in viri / Readings:

<ul style="list-style-type: none"> • Predmetnik in učni načrti za Biologijo 8 in 9; Naravoslovje 6 in 7 ter biološke izbirne predmete v osnovni šoli. • Učbeniki in druga učna gradiva za osnovno šolo. • Revije: The American biology teacher. Pedagoška obzorja. Center for Educational Policy Studies Journal – CEPS. Vzgoja in izobraževanje. Didakta, idr. • Marentič – Požarnik, B. Psihologija učenja in pouka: od poučevanje k učenju. DZS, Ljubljana, 2019. • Marentič – Požarnik, B. Psihologija učenja in pouka: temeljna spoznanja in primeri iz prakse. DZS, Ljubljana, 2018. • Ivanuš-Grmek, M., in Javornik Krečič, M. Osnove didaktike. Učbenik, Maribor: Pedagoška fakulteta, 2011. • Pinter, S. in Kozina, M. Približajmo naravo otrokom. Ljubljana: Ministrstvo za šolstvo in šport, Zavod za šport Slovenije in Planinska zveza Slovenije, 1998.

Cilji in kompetence:

Objectives and competences:

- usposobiti študente za:
- načrtovanje, izvajanje in analizo pouka;
- vrednotenje šolskega dela in znanja;
- uporabo pedagoško vsebinskih znanj pri pouku, laboratorijskem delu in terenskem delu.
- uporabo in preverjanje teoretičnih spoznanj v neposredni pedagoški praksi;
- pridobivanje pedagoških izkušenj in razvijanje kompetenc učitelja biologije.
- obvladovanje izobraževalne tehnologije.

- to train students for:
- planning, implementation and analysis of teaching;
- assesment of school work and knowledge:
- use of pedagogical content knowledge in instructions, laboratory work and outdoor activities in school work;
- use and verification of theoretical knowledge in the direct teaching practice;
- the acquisition of teaching experience in development of competences of biology teacher proficiency in use of instructional technologies.

Predvideni študijski rezultati:

Znanje in razumevanje:

- uporaba različnih strategij, konceptov, modelov, metod in oblik vzgojno – izobraževalnega procesa pri izvajanju pouka;
- analiziranje in samo vrednotenje izvajanja in preverjanja dosežkov iz izvedene učne ure.

Prenesljive/ključne spretnosti in drugi atributi:

- kombinirana uporaba različnih znanj pri izdelavi učne priprave za izvedbo konkretne učne ure;
- kompetence učitelja biologije.

Metode poučevanja in učenja:

- Seminarji v obliki razgovora in diskusij;
- demonstracije;
- individualno učno delo;
- uporaba IKT;
- izvedbe in analize učnih nastopov in pedagoške prakse – oblika individualnega dela.

Intended learning outcomes:

Knowledge and understanding:

- use of different strategies, concepts, models, methods and forms of the educational process; analyzing and self evaluating of the class appearances.

Transferable/Key Skills and other attributes:

- combined use of different teaching skills at the preparing the implementation of instructions; biology teacher competences.

Learning and teaching methods:

- Seminaires in the form of conversation and discussion;
- demonstrations;
 - individual educational work;
 - use of ICT;
 - implementation and analysis of teaching instructions and teaching practice - a form of individual work.

Delež (v %) /

Weight (in %)

Načini ocenjevanja:

- 2 nastopa v OŠ – med letom;
- 3 vzorčne hospitacije – med letom;
- najmanj 6 hospitacij kolegov – med letom;
- obveznosti na pedagoški praksi (4 nastopi in 6 hospitacije);

Predmet je ocenjen s končno opisno oceno "je opravljen", če je kandidat uspešno opravil vsako od naštetih obveznosti.

opravljen/passed

opravljen/passed

opravljen/passed

opravljen/passed

Assessment:

- 2 pedagogical class appearances in the primary school;
- 3 example observations;
- at least 6 observations of other students appearances;
- pedagogical practice (4 class appearances and 6 observations),

The course is rated with the final descriptive assessment "has passed" if the candidate has successfully completed each of the above obligations.

Reference nosilca / Lecturer's references:

- ŠPERNJAK, Andreja, ŠORGO, Andrej. Differences in acquired knowledge and attitudes achieved with traditional, computer-supported and virtual laboratory biology laboratory exercises. *Journal of Biological Education*, ISSN 0021-9266, 2018, vol. 52, iss. 2, str. 206-220, ilustr., doi: [10.1080/00219266.2017.1298532](https://doi.org/10.1080/00219266.2017.1298532). [COBISS.SI-ID [23069192](https://www.cobiss.si/record/23069192)]
- ŠORGO, Andrej, DOJER, Brina, GOLOB, Nika, REPNIK, Robert, REPOLUSK, Samo, PESEK, Igor, PLOJ VIRTIČ, Mateja, ŠPERNJAK, Andreja, ŠPUR, Natalija. Opinions about STEM content and classroom experiences as predictors of upper secondary school students' career aspirations to become researchers or teachers. *Journal of research in science teaching*, ISSN 0022-4308, 2018, str. 1-21, ilustr., doi: doi.org/10.1002/tea.21462. [COBISS.SI-ID [23839240](https://www.cobiss.si/record/23839240)]
- ŠPERNJAK, Andreja, ŠORGO, Andrej. Dissection of mammalian organs and opinions about it among lower and upper secondary school students. *CEPS journal : Center for Educational Policy Studies Journal*, ISSN 1855-9719, 2017, vol. 7, no. 1, str. 111-130, tabele. http://www.cepsj.si/pdfs/cepsj_7_1/pp_111-130.pdf. [COBISS.SI-ID [11495497](https://www.cobiss.si/record/11495497)]
- DOLNIČAR, Danica, BOH PODGORNİK, Bojana, BARTOL, Tomaž, ŠPERNJAK, Andreja, ŠORGO, Andrej. Predlog meril in kazalcev informacijske pismenosti za srednje šole = Proposed information literacy standards and performance indicators for secondary education. *Knjižnica : revija za področje bibliotekarstva in informacijske znanosti*, ISSN 0023-2424. [Tiskana izd.], 2018, letn. 62, št. 1/2, str. 69-91, ilustr. [COBISS.SI-ID [1412446](https://www.cobiss.si/record/1412446)]
- ŠPERNJAK, Andreja, ŠORGO, Andrej. Pre-service and in-service teachers' views on human reproduction and sex education. V: GÓMEZ CHOVA, Louis (ur.). *Edulearn18 : conference proceedings*, 10th International Conference on Education and New Learning Technologies, Palma (Spain), 2nd-4th of July, 2018, (EDULEARN proceedings (Internet), ISSN 2340-1117). [Palma]: IATED Academy. 2018, str. 6528-6535. [COBISS.SI-ID [24007432](https://www.cobiss.si/record/24007432)]
- ŠPERNJAK, Andreja, ŠORGO, Andrej. Outlines for science digital competence of elementary school students. V: SKALA, Karolj (ur.). *MIPRO 2018 : 41st International Convention, May 21 -25, 2018, Opatija, Croatia : proceedings*, (MIPRO ... (CD-ROM), ISSN 1847-3946). Rijeka: Croatian Society for Information and Communication Technology, Electronics and Microelectronics - MIPRO. 2018, str. 901-905. http://docs.mipro-proceedings.com/proceedings/mipro_2018_proceedings.pdf. [COBISS.SI-ID [23877896](https://www.cobiss.si/record/23877896)]