



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Izbrana poglavja iz varstvene biologije
Course title:	Selected Topics in Conservation Biology

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	Lab. vaje Laboratory work	Terenske vaje Field work	Samost. delo Individ. work	ECTS
20	10				150	6

Nosilec predmeta / Lecturer: Boris KRYŠTUFEK

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

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

Poznavanje biologije, ekologije in biodiverzitet na ravni drugostopenjskega programa

Prerequisites:

Knowledge of biology, ecology and biodiversity at master level

Vsebina:

Obravnavana so izbrana poglavja iz naslednjih sklopov. -Koncept vrst in varstvena biologija
-Globalna in regionalna pestrost organizmov
-Izguba in ogrožanje biodiverzitet
-Monitoring biodiverzitet
-Upravljanje z naravnimi habitati
-Upravljanje z vrstami
-Trajnost in upravljanje s semi-naravnimi habitati
-Ekološko restavriranje

Content (Syllabus outline):

Selected topics in the following chapters are discussed.
-The species concept and conservation
-Global and regional biodiversity
-Losses and threats of biodiversity
-Monitoring of biodiversity
-Management of natural habitats
-Management of species
-Sustainability, and the management of seminatu

-Okoljska ekonomika, zakonodaja in izobraževanje

ral habitats -Ecological restoration
-Environmental economics, law and education

Temeljni literatura in viri / Readings:

- Kryštufek, B., 1999: Osnove varstvene biologije. Tehniška založba Slovenije. Ljubljana.
- MacDonald, D., Service, K. 2007: Key Topics in Conservation Biology. Oxford Univ. Press
<http://www.gci.org.uk/Documents/Key-Topics-in-Conservation-Biology.pdf>
- Primack, R.B., Sher, A.A. 2016: An introduction to conservation biology. Sinauer Ass. Press, Sunderland
https://www.sinauer.com/media/wysiwyg/samples/Primack_and_Sher_brochure.pdf
- Sodhi, N.S., Ehrlich, P.R. 2010: Conservation Biology for All. Oxford Univ. Press
<http://ukcatalogue.oup.com/product/9780199554249.do>

Cilji in kompetence:

Razumevanje biodiverzitetnih vzorcev
Razumevanje biodiverzitetnih procesov
Razumevanje biodiverzitetne krize
Poznavanje metod merjenja in spremljanja biodiverzitete
Poznavanje postopkov upravljanja z naravnimi ter semi-naravnimi habitati in vrstami
Podrobno poznavanje naravovarstvene zakonodaje

Objectives and competences:

Acquire knowledge on biodiversity patterns
Acquire knowledge on biodiversity processes
Acquire knowledge on biodiversity crisis
Advanced knowledge of measuring methods and monitoring of biodiversity
Advanced knowledge of procedures of managing natural and semi-natural habitats and species
Advanced knowledge of nature conservation legislation

Predvideni študijski rezultati:

Znanje in razumevanje:

Študenti

- Osvojijo podrobno znanje o biodiverzitetnih procesih
- Znajo podrobno načrtovati, izvesti in vrednotiti monitoring biodiverzitete
- Podrobno razumejo postopke upravljanja habitatov, vrst
- Podrobno poznajo pravne predpise s področja naravovarstva in biodiverzitete

Prenesljive/ključne spretnosti in drugi atributi:

- Vrhunska sposobnost prepoznavanja in reševanja naravovarstvene problematike
- Vrhunska sposobnost načrtovanja, izvajanja

Intended learning outcomes:

Knowledge and understanding:

Students:

- Acquire Advanced knowledge on biodiversity processes
- Know how to plan, execute and evaluate biodiversity monitoring.
- Understand in detail procedures of habitat and species management
- Know in detail nature conservation and biodiversity legislation

Transferable/Key Skills and other attributes:

- Top-level ability to recognize and solve nature conservation problems
- Top-level ability to plan, execute and evaluate biodiversity monitoring

a in vrednotenja biodiverzitetnega monitoringa • Vrhunska uposobljenost upravljanja in presojanja vplivov na habitate in populacije posameznih vrst	• Top-level ability to provide management and judge the effects on habitats and population s of selected species
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Metode poučevanja in učenja:

Learning and teaching methods:

Predavanja Seminarske vaje	Lectures Seminar exercise
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Delež (v %) /

Načini ocenjevanja:

Weight (in %)

Assessment:

Pisni izpit	100%	Written examination
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Reference nosilca / Lecturer's references:

KRYŠTUFEK, Boris, JANŽEKovič, Franc, HUTTERER, Rainer, KLENOVŠEK, Tina. Morphological evolution of the skull in closely related bandicoot rats : a comparative study using geometric morphometrics. *Hystrix*, ISSN 0394-1914, 2016, vol. 27, no. 2, str. 1-7, ilustr., doi: [10.4404/hystrix-27.2-11639](https://doi.org/10.4404/hystrix-27.2-11639). [COBISS.SI-ID [22920456](https://www.cobiss.si/id/22920456)]

AL SAYEGH-PETKOVŠEK, Samar, KOPUŠAR, Nataša, TOME, Davorin, KRYŠTUFEK, Boris. Risk assessment of metals and PAHs for receptor organisms in differently polluted areas in Slovenia. *Science of the total environment*, ISSN 0048-9697, 2015, vol. 532, str. 404-414, ilustr. <http://dx.doi.org/10.1016/j.scitotenv.2015.05.0760048-9697>, doi: [10.1016/j.scitotenv.2015.05.076](https://doi.org/10.1016/j.scitotenv.2015.05.076). [COBISS.SI-ID [1221078](https://www.cobiss.si/id/1221078)]

KRYŠTUFEK, Boris, ABRAMSON, N. I., KOTROŠAN, Dražen. Rescue Eastern Europe's collections : correspondence. *Nature*, ISSN 1476-4687. [Online ed.], 19. feb. 2015, letn. 518, 303, [1] str. <http://www.nature.com/nature/journal/v518/n7539/full/518303b.html>, doi: [doi:10.1038/518303b](https://doi.org/10.1038/518303b). [COBISS.SI-ID [1462261](https://www.cobiss.si/id/1462261)]

KOREN, Toni, JELIĆ, Mišel, KRYŠTUFEK, Boris. Mitochondrial sequences yield new insight into the Quaternary history of the edible dormouse on the landbridge Adriatic islands. *Mammalian biology*, ISSN 1616-5047, 2015, vol. 80, issue 2, str. 128-134, ilustr. <http://www.sciencedirect.com/science/article/pii/S1616504714000688>, doi: [10.1016/j.mambio.2014.07.007](https://doi.org/10.1016/j.mambio.2014.07.007). [COBISS.SI-ID [1536854980](https://www.cobiss.si/id/1536854980)]

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L SAYEGH-PETKOVŠEK, Samar, KOPUŠAR, Nataša, KRYŠTUFEK, Boris. Small mammals as biomonitors of metal pollution : a case study in Slovenia. *Environmental monitoring and*

assessment, ISSN 0167-6369, 2014, vol. 186, iss. 7, str. 4261-4274, ilustr.

<http://dx.doi.org/10.1007/s10661-014-3696-7>, doi: [10.1007/s10661-014-3696-7](https://doi.org/10.1007/s10661-014-3696-7). [COBISS.SI-ID [1160406](#)]

NADERI, Gholamreza, KABOLI, Mohammad, KOREN, Toni, KARAMI, Mahmoud, ZUPAN, Sara, REZAEI, Hamid R., KRYŠTUFEK, Boris. Mitochondrial evidence uncovers a refugium for the fat dormouse (*Glis glis* Linnaeus, 1766) in Hyrcanian forests of northern Iran. *Mammalian biology*, ISSN 1616-5047, 2014, vol. 79, issue 3, str. 202-207.

<http://www.sciencedirect.com/science/article/pii/S1616504713002358>, doi: [10.1016/j.mambio.2013.12.001](https://doi.org/10.1016/j.mambio.2013.12.001). [COBISS.SI-ID [1536236484](#)]

CHIŠAMERA, Gabriel, BUŽAN, Elena, SAHLEAN, Tiberiu, MURARIU, Dumitru, ZUPAN, Sara, KRYŠTUFEK, Boris. Bukovina blind mole rat *Spalax graecus* revisited : phylogenetics, morphology, taxonomy, habitat associations and conservation. *Mammal review*, ISSN 0305-1838, 2014, vol. 44, iss. 1, str. 19-29, ilustr., zvd. <http://onlinelibrary.wiley.com/doi/10.1111/mam.12001/pdf>, doi: [10.1111/mam.12001](https://doi.org/10.1111/mam.12001). [COBISS.SI-ID [2373843](#)]

BUŽAN, Elena, BRYJA, Josef, ZEMANOVÁ, Barbora, KRYŠTUFEK, Boris. Population genetics of chamois in the contact zone between the Alps and the Dinaric Mountains : uncovering the role of habitat fragmentation and past management. *Conservation Genetics*, ISSN 1566-0621. [Tiskana izd.], 2013, vol. 14, issue 2, str. 401-412, graf. prikazi.

<http://link.springer.com/article/10.1007/s10592-013-0469-8>, doi: [10.1007/s10592-013-0469-8](https://doi.org/10.1007/s10592-013-0469-8). [COBISS.SI-ID [2365395](#)]

KLENOVŠEK, Tina, KRYŠTUFEK, Boris. An ontogenetic perspective on the study of sexual dimorphism, phylogenetic variability, and allometry of the skull of European ground squirrel, *Spermophilus citellus* (Linnaeus, 1766). *Zoomorphology*, ISSN 0720-213X, 2013, vol. 132, iss. 4, str. 433-445, doi: [10.1007/s00435-013-0196-1](https://doi.org/10.1007/s00435-013-0196-1). [COBISS.SI-ID [19948296](#)]

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<http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8555600&fulltextType=BT&fileId=S003060531200004X>, doi: [10.1017/S003060531200004X](https://doi.org/10.1017/S003060531200004X). [COBISS.SI-ID [2208979](#)]

KRYŠTUFEK, Boris, IVANITSKAYA, Elena, ARSLAN, Atila, ARSLAN, Emine, BUŽAN, Elena. Evolutionary history of mole rats (genus *Nannospalax*) inferred from mitochondrial cytochrome b sequence. *Biological journal of the Linnean Society*, ISSN 0024-4066. [Print ed.], 2012, vol. 105, iss. 2, str. 446-455, zvd., graf. prikazi. <http://onlinelibrary.wiley.com/doi/10.1111/j.1095-8312.2011.01795.x/full>, doi: [10.1111/j.1095-8312.2011.01795.x](https://doi.org/10.1111/j.1095-8312.2011.01795.x). [COBISS.SI-ID [2117075](#)]