



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. 2. ali 3. ; 1st, 2nd or 3rd
Doctoral Study Ecological Sciences, 3rd degree			

Vrsta predmeta / Course type

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
5	5				140	5

Nosilec predmeta / Lecturer:

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

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

Poznavanje biologije, ekologije in biodiverzitete 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 biodiverzitete
-Monitoring biodiverzitete
-Upravljanje z naravnimi habitati
-Upravljanje z vrstami
-Trajnost in upravljanje s semi-naravnimi habitati
-Ekološko restavriranje
-Okoljska ekonomika, zakonodaja in izobraževanje

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

Temeljni literatura in viri / Readings:

-Groombridge, B. (Ur.), 1992: Global Biodiversity. Status of the Earth's Living Resources. Chapman & Hall. London.

-Hamblin, C., 2004: Conservation. Cambridge University Press. Cambridge.

-Kryštufek, B., 1999: Osnove varstvene biologije. Tehniška založba Slovenije. Ljubljana.

-Meffe, G. K., C. R. Carroll, 1997: Principles of conservation biology. Sinauer Associates. Massachusetts.

Cilji in kompetence:

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

Objectives and competences:

Acquire knowledge on biodiversity processes
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

- Usvojijo 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 usposobljenost prepoznavanja in reševanja naravovarstvene problematike
- Vrhunska usposobljenost načrtovanja, izvajanja in vrednotenja biodiverzitetnega monitoringa
- Vrhunska usposobljenost upravljanja in presojanja vplivov na habitate in populacije posameznih vrst

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
- Top-level ability to provide management and judge the effects on habitats and populations of selected species

Metode poučevanja in učenja:

- Predavanja
- Seminarske vaje
- Terenske vaje

Learning and teaching methods:

- Lectures
- Seminar exercises
- Field exercises

Načini ocenjevanja:

- Seminarska naloga
- Ustni izpit

Delež (v %) /

Weight (in %)

Assessment:

	50 %	• Seminar essay
	50 %	• Oral examination

Reference nosilca / Lecturer's references:

Mitja Kaligarič:

PIPENBAHER, Nataša, KALIGARIČ, Mitja, ŠKORNIK, Sonja. Floristic and functional comparison of karst pastures and karst meadows from the North Adriatic Karst = Floristična in funkcionalna primerjava kraških pašnikov in kraških travnikov severnojadranskega Krasa. *Acta carsol.*, 2011, letn. 40, št. 3, str. 515-525.

KALIGARIČ, Mitja, MEISTER, Margit H., ŠKORNIK, Sonja, ŠAJNA, Nina, KRAMBERGER, Branko, BOLHÁRNORDENKAMPF, Harald R. Grassland succession is mediated by umbelliferous colonizers showing allelopathic potential. *Plant Biosyst.* (Firenze, Testo stamp.), 2011, vol. 145, no. 3, str. 688-698, ilustr.

ŠKORNIK, Sonja, VIDRIH, Matej, KALIGARIČ, Mitja. The effect of grazing pressure on species richness, composition and productivity in North Adriatic Karst pastures. *Plant Biosyst.* (Firenze, Testo stamp.), 2010, vol. 144, no. 2, str. 355-364, ilustr.

ŠKORNIK, Sonja, ŠAJNA, Nina, KRAMBERGER, Branko, KALIGARIČ, Simona, KALIGARIČ, Mitja. Last remnants of riparian wooded meadows along the middle Drava River (Slovenia) : species composition is a response to light conditions and management. *Folia geobot.*, dec. 2008, vol. 43, no. 4, str. 431-445.

Boris Kryštufek:

KRYŠTUFEK, Boris, LUŽNIK, Martina, VARLJEN BUŽAN, Elena. Mitochondrial cytochrome b sequences resolve the taxonomy of field mice (*Apodemus*) in the western Balkan refugium. *Acta Theriol.*, 2012, vol. 57, no. 1, str. 1-7, graf. prikazi, zvd.

KRYŠTUFEK, Boris, IVANITSKAYA, Elena, ARSLAN, Atilla, ARSLAN, Emine, VARLJEN BUŽAN, Elena. Evolutionary history of mole rats (genus *Nannospalax*) inferred from mitochondrial cytochrome b sequence. *Biol. J. Linn. Soc.*

KRYŠTUFEK, Boris, KLENOVŠEK, Tina, VARLJEN BUŽAN, Elena, LOY, Anna, JANŽEKOVIČ, Franc. Cranial divergence among evolutionary lineages of Martino's vole, *Dinaromys bogdanovi*, a rare Balkan paleoendemic rodent. *J. mammal.*, 2012, vol. 93, iss. 3, str. 818-825

KRYŠTUFEK, Boris, ZORENKO, Tanya, VARLJEN BUŽAN, Elena. New insights into the taxonomy and phylogeny of social voles inferred from mitochondrial cytochrome b sequences. *Mamm. biol.*, 2012, vol. 77, issue 3, str. 178-182, graf prikazi.

LUŽNIK, Martina, VARLJEN BUŽAN, Elena, KRYŠTUFEK, Boris. Mitochondrial sequences do not support the independent taxonomic position of the extinct Alpine newt subspecies *Mesotriton alpestris lacusnigri*. *Amphib-reptil.*, 2011, vol. 32, issue 3, str. 435-440, graf. Prikaz

KRYŠTUFEK, Boris, REŽEK DONEV, Nataša, SKOK, Janko. Species richness and distribution of non-volant small mammals along an elevational gradient on a Mediterranean mountain. *Mammalia (Paris)*, 2011, vol. 75, iss. 1, str. 3-11

VARLJEN BUŽAN, Elena, PAGÈS, Marie, MICHAUX, Johan, KRYŠTUFEK, Boris. Phylogenetic position of the Ohiya rat (*Srilankamys ohiensis*) based on mitochondrial and nuclear gene sequence analysis. *Zool. scr.*, 2011, vol. 40, issue 6, str. 545-553.

VARLJEN BUŽAN, Elena, FÖRSTER, Daniel W., SEARLE, Jeremy B., KRYŠTUFEK, Boris. A new cytochrome b phylogroup of the common vole (*Microtus arvalis*) endemic to the Balkans and its implications for the evolutionary history of the species. *Biol. J. Linn. Soc.* [Print ed.], 2010, vol. 100, iss. 4, str. 788-796, ilustr