



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Varstvena biologija sesalcev in ptičev
Course title:	Conservation Biology of Mammals and Birds

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Biologija, 1. stopnja	/	2. ali 3.;	3. ali 4. ali 5. ali 6.
Ekologija z naravovarstvom, 1. stopnja	/	3	5 ali 6
Enovit magistrski študijski program druge stopnje Predmetni učitelj	Izobraževalna biologija	3. ali 4.	5. ali 8.
Biology, 1 st cycle	/	2 nd or 3 rd	3 rd or 4 th or 5 th or 6 th
Ecology with Nature Conservation, 1 st cycle	/	3 rd	5 th or 6 th
Five-year master's degree program Subject Teacher	Educational biology	3 rd or 4 th	5 th or 8 th

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
30	15				135	6

Nosilec predmeta / Lecturer:

Franc JANŽEKOVIČ

Jeziki /

Predavanja / Lectures:

slovenščina / Slovene

Languages:

Vaje / Tutorial:

Prerequisites:

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

Jih ni.

None.

Vsebina:

- Osnove varstvene biologije
- Koncept vrst in varstvena biologija
- Globalna in regionalna pestrost sesalcev in ptic
- Izguba in ogrožanje pestrosti sesalcev in ptic
- Varstvena biologija sesalcev in ptic na vrstnem nivoju
- Populacijska dinamika sesalcev in ptic v heterogeni pokrajini
- Varstveni management sesalčjih in ptičjih vrst
- Ekološko restavriranje
- Slovenska in mednarodna naravovarstvena zakonodaja
- Poglobljene študije primerov v obliki seminarjev, ki se vsebinsko navezujejo na vsebino predmeta

Content (Syllabus outline):

- Principles of conservation biology
- The species concept and conservation
- Global and regional biodiversity of mammals and birds
- Losses and threats of mammals and birds biodiversity
- Conservation of diversity within mammals and birds species
- Population dynamics of mammals and birds in heterogeneous landscapes
- Conservation management of mammals and birds species
- Ecological restoration
- Slovenian and international nature conservation legislation
- In depth of cases in the form of seminars and that are related to the course content.

Temeljni literatura in viri / Readings:

Temeljna literatura:

Kryštufek, B. (1999). Osnove varstvene biologije. Tehniška založba Slovenije.

Dodatna literatura:

Sodhi, N.S., Ehrlich, P.R. (2010). Conservation Biology for All. Oxford University Press.

Gill, F. B. (1995 in novejšje izdaje). Ornithology. W. H. Freeman and Company.

Vaughan, T. A., Ryan, J.M., Czaplewski, N.J. (2000 in novejšje izdaje). Mammalogy. Thomson Learning.

Cilji in kompetence:

Objectives and competences:

Študentje bodo pridobili znanje in razumevanje:

- osnovne pojme in koncepte s področja biodiverzitetnih procesov pri sesalcih in pticah
- o vzrokih in mehanizmih: za upadanje velikosti populacij, za upadanje genetske pestrosti in za izumiranje vrst
- o postopkih in metodah pomoči prizadetim populacijam oz. prizadetim vrstam
- o postopkih in metodah restavriranja habitatov in vzpostavljanju nadomestnih habitatov
- o slovenski in mednarodni zakonodaji s področja ohranjanja narave in varovanju ptic in sesalcev

Students will gain knowledge and understanding of:

- basic issues and concepts on biodiversity process in mammals and birds
- on causes and mechanisms: for population decline, genetic diversity decline and extinction of species
- procedures and methods of assistance to affected populations or affected species
- on restoration and methods procedures for habitats and on the establishment of alternative habitats
- on Slovenian and international legislation in the field of nature conservation and protection of birds and mammals

Predvideni študijski rezultati:

Po opravljenem kurzu naj bi bili študentje sposobni:

- navesti in pojasniti vzroke in mehanizme, ki privedejo do upadanja populacij ptic in seslcev
- reševati naravovarstvene izzive na izbranih ogroženih sesalcih in ptičjih populacijah
- sodelovati pri izdelavi naravovarstvenega menagementa izbranih sesalcih in ptičjih vrst
- sodelovati pri načrtovanju in izvajanju ekološkega restavriranja
- nastopati v pravnem prometu z namenom ohranjanja populacij in habitatov ogroženih vrst

Intended learning outcomes:

After the accomplished course the students should be able to:

- to list and explain the causes and mechanisms that lead to the decline of bird and mammal populations
- to address the nature conservation challenges of selected endangered mammals and bird populations
- participate in the production of a nature conservation management of selected mammals and bird species
- participate in the design and implementation of ecological restoration
- to act in nature protection law in order to conserve populations and habitats of endangered species

Metode poučevanja in učenja:

Predavanja
Seminarji

Learning and teaching methods:

Lectures
Seminar

Načini ocenjevanja:

Delež (v %) /

Weight (in %)

Assessment:

Seminarska naloga	40	Seminar essay
Pisni izpit	60	Written exam

Reference nosilca / Lecturer's references:

ŠTUMBERGER, Borut, JANŽEKOVICH, Franc. Stromschlagopfer in Pelagonien weisen auf populationsrelevante Verluste bei Vögeln hin. *Vogelwarte*. Mai 2025, bd. 63, hft. 2, str. 81-100, ilustr. ISSN 0049-6650. https://www.do-g.de/fileadmin/Vogelwarte_vol_63_2025-2_DOG.pdf. [COBISS.SI-ID [242759171](#)]

JANŽEKOVICH, Franc, KRYŠTUFK, Boris. The genome sequence of the European Snow Vole, *Chionomys nivalis* (Martins, 1842). *Wellcome open research*. 2025, vol. 10, [article no.] 156, 12 str., ilustr. ISSN 2398-502X. <https://doi.org/10.12688/wellcomeopenres.23922.1>, [Digitalna knjižnica Univerze v Mariboru – DKUM](#), DOI: [10.12688/wellcomeopenres.23922.1](https://doi.org/10.12688/wellcomeopenres.23922.1), DOI: [20.500.12556/DKUM-93790](https://doi.org/10.500.12556/DKUM-93790). [COBISS.SI-ID [230090243](#)]

DEVEDŽIĆ, Anida, URZI, Felicita, POKORNY, Boštjan, VENGUŠT, Gorazd, ŽELE-VENGUŠT, Diana, JANŽEKOVICH, Franc, VELIĆ, L., ETEROVIĆ, Toni, KALAMUJIĆ STROIL, Belma, BUŽAN, Elena. Spatial genetic characterization of the red fox (*Vulpes vulpes*) in the area between the Alps and the Central Dinaric Mountains. *Vavilovskij žurnal genetiki i selekcii : Elektronski vir*. 2024, vol. 28, no. 7, str. 752-758. ISSN 2500-3259. https://vavilov.elpub.ru/jour?locale=en_US, [Repozitorij Univerze v Ljubljani – RUL](#), DOI: [10.18699/vjgb-24-83](https://doi.org/10.18699/vjgb-24-83). [COBISS.SI-ID [216361987](#)]