



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Varstvena biologija
Course title:	Conservation Biology

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Biologija in ekologija z naravovarstvom, 2.stopnja		1.	2.
Biology and Ecology with Nature Conservation, 2 nd cycle		1st	2nd

Vrsta predmeta / Course type

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Laboratory work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
30	15			30	105	6

Nosilec predmeta / Lecturer:

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

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

Vsebina:

- Osnove varstvene biologije
- 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 polnaravnimi habitati
- Ekološka vnovična vzpostavitev ugodnega stanja

Content (Syllabus outline):

- Principles of conservation biology
- The species concept and conservation biology
- Global and regional biodiversity
- Losses and threats of biodiversity
- Monitoring of biodiversity
- Management of natural habitats
- Management of species
- Sustainability, and the management of semi natural habitats
- Ecological restoration

Temeljni literatura in viri / Readings:**Temeljna literatura / Basic readings:**

- Sodhi N.S., Ehrlich P.R., 2010: Conservation Biology for All. Oxford University press. (<http://www.conbio.org/publications/free-textbook>)
- Kryštufek, B., 1999: Osnove varstvene biologije. Tehniška založba Slovenije.

Priporočena literatura/ Recommended literature:

- Primack, R., P., 2010: Essentials of Conservation Biology.
- Ausden M., 2007: Habitat Management for Conservation: A Handbook of Techniques. Oxford.
- Rannow S., Neubert M., 2014: Managing protected areas in Central and Eastern Europe under climate change, (Advances in global change research 58). Springer.

Revija/Journal:

- Conservation Biology (Online ISSN: 1523-1739) – izbrani članki / selected articles
- Biological Conservation (ISSN: 0006-3207; Elsevier) – izbrani članki / selected articles

Cilji in kompetence:

- Pojasnitev temeljev biodiverzitetnih procesov.
- Uporaba metod merjenja in spremljanja biodiverzitete.
- Načrtovanje postopkov upravljanja z naravnimi ter polnaravnimi habitati in vrstami.
- Ovrednotenje dejavnikov ogrožanja z zmanjševanjem in izolacijo populacij.

Objectives and competences:

- Explanation of elemental knowledge on biodiversity processes.
- Use of measuring methods and monitoring of biodiversity.
- Planning of procedures of managing natural and semi-natural habitats and species.
- Evaluation of threatening factors for decline and isolation of populations.

Predvideni študijski rezultati:

- Znanje in razumevanje:
- biodiverzitetnih procesov;
 - načrtovanja, izvedbe in vrednotenja monitoringa biodiverzitete;
 - postopkov upravljanja habitatov, vrst;
 - prepoznavanja in reševanja naravovarstvene problematike.

Intended learning outcomes:

- Knowledge and Understanding:
- of biodiversity processes;
 - of planning, executing and evaluating of biodiversity monitoring;
 - of procedures of habitat and species management;
 - of recognition and solving of nature conservation issues.

Metode poučevanja in učenja:

- Predavanja
- Seminarske vaje
- Terenske vaje
- Individualno delo

Learning and teaching methods:

- Lectures
- Seminar
- Field work
- Individual work

Delež (v %) /

Weight (in %)

Načini ocenjevanja:

Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment:
Način (pisni izpit, ustno izpraševanje, naloge, projekt):		Type (examination, oral, coursework, project):
<ul style="list-style-type: none"> • Terensko delo (prisotnost, pisni test) pogoj za pristop k izpitu 	5%	<ul style="list-style-type: none"> • Field work (attendance, written exam) mandatory for final exam
<ul style="list-style-type: none"> • Seminarsko delo in predstavitev 	15%	<ul style="list-style-type: none"> • Seminar work and presentation
<ul style="list-style-type: none"> • Pisni izpit 	80%	<ul style="list-style-type: none"> • Written exam

Reference nosilca / Lecturer's references:

Nina Šajna
 KARLO, Tamara, ŠAJNA, Nina. (2017) Biodiversity related understory stability of small peri-urban forest after a 100-year recurrent flood. *Landscape and Urban Planning*, vol. 162, str. 104-114.

ŠAJNA, Nina. (2016) Alien plant species invading rare and protected habitats in Slovenia. V: TRAVLOS, Ilias S. (ur.). *Weed and pest control : molecular biology, practices and environmental impact*, (Plant science research and practices). New York: Nova Publishers. cop. 2016, str. 35-54.

IVAJSIČ, Danijel, ŠAJNA, Nina, KALIGARIČ, Mitja. (2016) Primary succession on re-created coastal wetland leads to successful restoration of coastal halophyte vegetation. *Landscape and Urban Planning*, vol. 150, str. 79-86.

Boris Kryštufek

MICHAUX, Jochan R., HÜRNER, Helene, KRYŠTUFEK, Boris, SARÀ, Maurizio, RIBAS, Alexis, RUCH, Tanja, et al. Genetic structure of a European forest species, the edible dormouse (*Glis glis*): a consequence of past anthropogenic forest fragmentation?. *Biological journal of the Linnean Society*, ISSN 0024-4066. [Print ed.], 2019, vol. 126, iss. 4, str. 836-851.

KRYŠTUFEK, Boris, NEDYALKOV, Nedko, ASTRIN, Jonas J., HUTTERER, Rainer. News from the Balkan refugium: Thrace has an endemic mole species (Mammalia: Talpidae). *The Bonn zoological bulletin*, ISSN 2190-7307, avg. 2018, vol. 67, no. 1, str. 41-57, ilustr.

KRYŠTUFEK, Boris, ZORENKO, Tanya, MAHMOUDI, Ahmad, BONTZORLOS, Vasileios A., ATANASOV, Nasko, IVAJSIČ, Danijel. Incipient road to extinction of a keystone herbivore in south-eastern Europe: Harting's vole (*Microtus hartingi*) under climate change. *Climatic change*, ISSN 0165-0009, 2018, vol. 149, iss. 3-4, str. 443-456, ilustr.

GIPPOLITI, Spartaco, BRITO, Daniel, CERFOLLI, Fulvio, FRANCO, Daniel, KRYŠTUFEK, Boris, BATTISTI, Corrado. Europe as a model for large carnivores conservation : is the glass half empty or half full?. *Journal for nature conservation*, ISSN 1617-1381, 2017, vol. 41, str. 73-78, ilustr.

MOUTON, Alice, KRYŠTUFEK, Boris, et al. Evolutionary history and species delimitations: a case study of the hazel dormouse, *Muscardinus avellanarius*. *Conservation genetics*, ISSN 1572-9737. [Spletna izd.], 2017, vol. 18, iss. 1, str. 181-196, ilustr.