



Univerza v Mariboru



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Fakulteta za naravoslovje in  
matematiko

### UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Uvod v varstvo narave
Course title:	Introduction to nature conservation

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Ekologija z naravovarstvom, 1. stopnje		2	4
Ecology with nature protection, 1st. degree			

Vrsta predmeta / Course type	obvezni / obligatory
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Univerzitetna koda predmeta / University course code:	
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Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Laboratory work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
30	15			15	90	5

Nosilec predmeta / Lecturer:	Damijan DENAC
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Jeziki / Languages:	Predavanja / Lectures: Vaje / Tutorial:	Slovenski /Slovenian Slovenski /Slovenian
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Pogoji za vključitev v delo oz. za opravljanje  
študijskih obveznosti:

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**Vsebina:**

Ena največjih kriz, s katerimi se spopada človeštvo, je biodiverzitetna kriza. Naravovarstvo je utemeljeno s paradigmami varstvene biologije, z zakonodajo in je velikokrat temelj lokalnih, regionalnih in nacionalnih družbenih razvojnih priložnosti. Načini varstva narave so zelo različni in obsegajo delo državnih služb, nevladnih organizacij in posameznikov. Obstajajo nacionalni in mednarodni instrumenti varstva narave (Rdeči seznami, konvencije, nacionalna in druga zakonodaja...). Varstvo narave je krizna disciplina, zato je posebej pomembna njena učinkovitost. Obstaja velik razkorak med »teoretičnim varstvom« na papirju (v konvencijah, namerah, zakonodaji) in manifestiranim (implemenacija zakonodaje, izboljšanje stanja na terenu, renaturacije...). Družbeni pomen varstva narave je predvsem v ohranjanju ekosistemskih storitev, od katerih je neposredno odvisno tudi človeštvo. Eno pomembnejših orodij varstva narave danes so naravni rezervati. Rezervate vzpostavljamo z namenom, da ohranimo diverziteto bioloških komponent in ekoloških procesov, ki bi jih zaradi degradacije izgubili. Rezervati imajo tudi pomembno izobraževalno vlogo in služijo kot primeri trajnostnega razvoja, pri čemer je trajnostni razvoj treba obravnavati na ekološkem, ekonomskem in socialnem nivoju. Rezervati prispevajo k ohranjanju ekosistemskih storitev, brez katerih bi človeška družba čutila velike posledice. Zato je pomembno kako izbiramo rezervatne površine in kako z njimi upravljam. Učinkovitost rezervata je odvisna najmanj od petih kritičnih dejavnikov – velikosti rezervata, raznovrstnosti in dinamike, krajinskega konteksta, pufrskih pasov in koridorjev. Velikokrat je pred vzpostavljanjem rezervata treba najprej izvesti restavriranje, torej ponovno vzpostaviti neko prvotno stanje. Trajnostno upravljanje z rezervati zagotavljamo na različne načine, trend novejše generacije rezervatov je v njihovi multipli rabi in integraciji, pri čemer so bistvenega pomena

**Content (Syllabus outline):**

One of the biggest recognized crisis on the World is biodiversity loss. Nature conservation is founded in paradigms of conservation biology and in the legislation. It is often the basis for local, regional and national development perspectives. Methods in nature conservation are diverse and include the efforts of public services, NGO's and individuals. There are numerous national and international instruments, e.g. Red lists, conventions, legislation... Nature conservation is a crisis discipline where its efficiency is of crucial importance. Discrepancy is evident between theoretical conservation on the paper and its manifestation in the field. Humankind depends to a very large extent on ecosystem services - their preservation is one of the major public benefits of nature conservation. Creation of nature reserves is nowadays one of the most important nature conservation tools. Reserves are established to preserve the diversity of biological components and ecological processes that would otherwise be lost due to degradation. Furthermore, reserves have an important role in public education and they serve as examples of sustainable development at the ecological, economic and social level. Reserves contribute to preservation of ecosystem services that are dramatically important for the society, too. Therefore selection of appropriate areas and their management are among the most important questions in the process of establishment and management of the reserves. Effectiveness of the reserve depends upon five factors – its size, heterogeneity and dynamics, landscape context, buffers, and corridors. Previous to establishment, restoration must often take place at the area. Sustainable management in the reserves can be assured by its multiple-use (e.g. conservation, tourism, farming practices etc.) but it should be science-based, clear aim-oriented and well balanced.

znanstvene/strokovne podlage, jasni cilji in v primeru različnih rab (npr. varstvo, turizem, kmetijstvo...) njihova uravnoteženost v smeri doseganja ciljev rezervata.

#### **Temeljni literatura in viri / Readings:**

- Begon, M. Townsend, C.R. & J.L. Harper (2006): Ecology From Individuals to Ecosystems. Blackwell Publishing.
- Kryšufek, B. (1999): Osnove varstvene biologije. TZS.
- Lawson, T.G. & T.M. Reed (1997): Nature Reserves: Who Needs Them? Joint Nature Conservation Committee.
- Lewis, C. (ed.) (1996): Managing Conflicts in Protected Areas. International Union for the Conservation of Nature and Natural Resources.
- Lockwood, M., Worboys, G. & A. Kothari (ed.) (2006): Managing Protected Areas: A Global Guide. Earthscan.
- Shafer, C.L. (1991): Nature Reserves: Island Theory and Conservation Practice. Smithsonian Institution Press.
- Stolton, S. & N. Dudley (ed.) (1999): Partnerships for Protection: New Strategies for Planning and Management for Protected Areas. Earthscan.
- Sutherland W.J. & D.A. Hill (ed.) (1995): Managing Habitats for Conservation. Cambridge University Press.
- Thomas, L. & J. Middleton (2003): Guidelines for Management Planning of Protected Areas. International Union for the Conservation of Nature and Natural Resources.
- Thomas, L. & J. Middleton (ed.) (2003): Guidelines for Management Planning of Protected Areas. International Union for the Conservation of Nature and Natural Resources.
- WCPA & IUCN (ed.) (1998): Economic Values of Protected Areas: Guidelines for Protected Area Managers. International Union for the Conservation of Nature and Natural Resources.
- Wright, R.G. (1997): National Parks and Protected Areas. Blackwell Science.

#### **Cilji in kompetence:**

Študentje spoznajo mehanizme in načine za učinkovito varstvo narave na lokalnem, regionalnem, nacionalnem in globalnem nivoju. Seznanijo se s pomenom strokovnega in znanstvenega dela v varstvu narave (pomen podatkov za odločanje, monitoringa).

Spoznajo, zakaj je varstvo narave pomembno za družbeni razvoj z ekološkega, ekonomskega in socialno-političnega področja. Razumejo potrebo kompleksnega pristopa pri vzpostavljanju in upravljanju z naravnimi rezervati.

#### **Objectives and competences:**

Students become aware of mechanisms and methods for successful nature conservation at the local, regional, national and international scale. They recognize the need of expert and scientific based approach in nature conservation and become aware of the importance of nature-conservation from ecological, socio-political and economical perspective. They understand the importance of complex approach in establishing and managing nature reserves.

**Predvideni študijski rezultati:**

Študentje (se) bodo:

- Spoznali kratko zgodovino varstva narave pri nas in v svetu.
- Seznanili s primeri učinkovitih naravovarstvenih praks na različnih nivojih pri nas in v tujini (zavarovana območja, njihovo upravljanje, vključevanje javnosti).
- Spoznali pomen družbene odgovornosti in prostovoljstva ter vloge posameznika v varstvu narave.
- Spoznali povezanost varstva narave in ohranjanja ekosistemskih storitev.
- Spoznali največje dejavnike ogrožanja narave (int. kmetijstvo, netrajnostni posegi...) pri nas in mehanizme ukrepanja za njihovo preprečevanje oz. omilitev (Kmetijsko-okoljski program, kmetijsko – okoljski ukrepi...).
- Seznanili z delom državnih in nevladnih organizacij s področja varstva narave pri nas.
- Seznanili s pomenom strokovne, znanstvene in etične legitimnosti v varstvu narave.
- Spoznali pomen vključevanja javnosti in izobraževanja za doseganje ciljev varstva narave.
- Spoznali pravna (Direktive, Konvencije...) in finančna orodja (nacionalni in mednarodni mehanizmi – fundacije MAVA, Euronatur, CEPF, LIFE+...) za doseganje ciljev varstva narave.
- Razumeli pomen vzpostavljanja naravnih rezervatov z vidika ohranjanja biodiverzitete in zagotavljanja ekosistemskih storitev.
- Seznanili z mednarodnimi in nacionalnimi postopki za vzpostavljanje naravnih rezervatov.
- Razumeli nujne korake pri načrtovanju naravnih rezervatov.
- Seznanili z elementi načrta upravljanja naravnega rezervata in razumeli pomen njegove priprave.
- Razumeli pomen conacije naravnih rezervatov in metodologijo za opredelitev con.
- Seznanili s primeri dobrih praks trajnostnega upravljanja z naravnimi rezervati na vseh treh nivojih – naravovarstvenem, ekonomskem in socialnem.

**Intended learning outcomes:**

Students will:

- acquire knowledge of history of nature conservation in Slovenia and in the World
- become familiar with examples of efficient nature-conservation at different levels in SLO and abroad
- become aware of the role of public responsibility and of individuals in nature conservation
- understand the connection between nature conservation and protection of ecosystem services
- recognize factors with largest negative effect on nature (intensive agriculture, unsustainable activities) and mechanisms to prevent or mitigate their effects (Rural development programme, agri-environmental schemes...)
- become familiar with the work of governmental and NGO's in the field of nature conservation
- become aware of the importance of expert, scientific and ethical background in nature conservation
- understand the role of including public and education in achieving goals of nature conservation
- become familiar with the legislative (directives, conventions) and financial instruments (foundations, MAVA, Euronatur, CEPF, LIFE+...) for nature conservation
- become aware of importance of nature reserves establishing for biodiversity and ecosystem services protection,
- acquire knowledge on international and national procedures for establishing nature reserves,
- understand basic steps in nature reserve planning,
- acquire knowledge on how to prepare an effective management plan for nature reserve and become aware of the importance of its preparation,
- understand importance of conation in reserves and become familiar with the conation methodology,

<p>-Spoznali vlogo naravnih rezervatov v širšem družbenem kontekstu (varstvo biodiverzitete, ohranjanje ekosistemskih storitev, izobraževanje, povezovanje in sodelovanje različnih sektorjev, vključevanje domačinov, omogočanje regionalnega razvoja, integracija vseh skupin javnosti in družbe, krepitev prostovoljstva, spodbujanje trajnostne rabe, zdravega načina življenja, itd.)</p>	<p>- become familiar with best-practice examples of sustainable management in nature reserves at all three levels – ecological, economical and socio-political,          -realize the multiple role of nature reserves in broad social context (protecting biodiversity, preserving ecosystem services, education, multiple sector linking and cooperation, integrating local people, enabling regional development perspectives, integration of all groups of civil society and public, stimulating volunteering, sustainable use of natural resources, healthy life style etc.)</p>
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#### **Metode poučevanja in učenja:**

Predavanja, diskusije, seminarji, konzultacije, terensko delo

#### **Learning and teaching methods:**

Lectures, discussions, seminars, consultations, field work

Delež (v %) /

Weight (in %)

#### **Assessment:**

#### **Načini ocenjevanja:**

<p>Pisni izpit</p>	<p><b>60</b></p>	<p>Written examination</p>
<p>Seminarska naloga</p>	<p><b>40</b></p>	<p>Seminar</p>

#### **Reference nosilca / Lecturer's references:**

- TOME, Davorin, DENAC, Damijan. Survival and development of predator avoidance in the post-fledging period of the Whinchat (*Saxicola rubetra*) : consequences for conservation measures. *J. Ornithol.*, 2012, vol. 153, no. 1, str. 131-138. <http://dx.doi.org/10.1007/s10336-011-0713-2>, doi: [10.1007/s10336-011-0713-2](https://doi.org/10.1007/s10336-011-0713-2). [COBISS.SI-ID [2387535](#)]
- DENAC, Damijan, KOCE, Urša, TOME, Davorin, VREZEC, Al. Lov in uravnavanje populacij ptic = Hunting and population regulation in birds. *Varst. narave*, 2010, št. 23, str. 39-53. [COBISS.SI-ID [26944473](#)]
- BOŽIČ, Luka, DENAC, Damijan. Številčnost in razširjenost izbranih gnezdk struge reke Drave med Mariborom in Središčem ob Dravi (SV Slovenija) v letih 2006 in 2009 ter vzroki za zmanjšanje njihovih populacij =

Abundance and distribution of selected breeding river-bed birds on the Drava River between Maribor and Središče ob Dravi (NE Slovenia) in 2006 and 2009, and causes of the reduction of their populations. *Acrocephalus*, 2010, letn. 31, št. 144, str. 27-45, ilustr., doi: [10.2478/v10100-010-0004-7](https://doi.org/10.2478/v10100-010-0004-7). [COBISS.SI-ID [27898073](#)]

- DENAC, Damijan, SMOLE, Jakob, VREZEC, Al. Naravovarstveno vrednotenje aviafavne ob Savi med Krškim in Jesenicami na Dolenjskem s predlogom novega mednarodno pomembnega območja (IBA) za ptice v Sloveniji = Avifaunal conservation assessment of the Sava river between Krško and Jesenice na Dolenjskem and a proposal for a new important bird area (IBA) in Slovenia. *Nat. Slov.*.. [Tiskana izd.], 2009, letn. 11, št. 1, str. 25-57. [COBISS.SI-ID [25757145](#)]
- DENAC, Damijan. Common tern *Sterna hirundo* breeding population : development and nature conservation management results at the Ormož wastewater basins between 1992 and 2002 (NE Slovenia) = Razvoj kolonije navadnih čiger *Sterna hirundo* in rezultati naravovarstvenega upravljanja v bazenih za odpadne vode pri Ormožu v obdobju 1992-2002 (SV Slovenija). *Acrocephalus*, 2002, letn. 23, št. 115, str. 163-168. [COBISS.SI-ID [18726361](#)]