



Univerza v Mariboru



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Fakulteta za naravoslovje in
matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Izbrana poglavja iz biodiverzitete
Course title:	Selected Courses in Biodiversity

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Biologija in ekologija z naravovarstvom, 2. stopnja		2	3
Biology and Ecology with Nature Conservation, 2 nd Level		2	3

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	30				120	6

Nosilec predmeta / Lecturer:

Jeziki / Languages:

Predavanja / Lectures:	Slovenski/Slovenian
Vaje / Tutorial:	

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

Prerequisites:

Vsebina:

- Opredelitev biodiverzitete v globalnem merilu; temelji ekološkega in evolucijskega ozadja.
- Abundanca, redkost in izumrtje.
- Izguba habitatov, njihova degradacija in fragmentacija.
- Biodiverziteta posameznih taksonomskih skupin.
- Vzorci in trendi pri izbranih skupinah organizmov.

Praktični segment biodiverzitete: CITES in druge konvencije v zvezi z biodiverzitetjo (CBD, Bernska, Ramsarska, Barcelonska etc.)

Content (Syllabus outline):

- Definition of biodiversity on global scale: ecological and evolutionary background.
- Abundance, rarity, extinctions.
- Habitat loss, their degradation and fragmentation.
- Biodiversity among taxonomical groups.
- Patterns and trends within selected taxonomic groups.
- Practical issues: CITES and other conventions regarding global biodiversity (CBD, Berne, Ramsar, Barcelona etc.)

Temeljni literatura in viri / Readings:

- Dobson, A. P., 1995: Conservation and Biodiversity. American Scientific Library, New York.
- Kryštufek, B. 1999: Osnove varstvene biologije. Tehniška založba Slovenije, Ljubljana.
- Levin, S. A. 2001: Encyclopedia of biodiversity. Academic Press, cop. San Diego.
- Gaston, K., J. I. Spicer. 1998. Biodiversity. An Introduction. Blackwell Science. London. (in novejši izdaji)
- Rosenzweig, M.L. 2002. Species diversity in space and time. Cambridge University Press. Cambridge. (in novejši izdaji)
- Sodhi, N.S., P.R. Ehrlich. 2010: Conservation Biology for All. Oxford University Press. Oxford.
- Legendre P., L. Legendre. 2012: Numerical Ecology. Elsevier. Amsterdam.

Cilji in kompetence:

- Študenti se seznanijo z ekološkimi in evolucijskimi temelji biodiverzitete.
- Spoznajo vrstno biodiverzitetjo po taksonomskih skupinah.
- Spoznajo naravne (abundanca, redkost, izumrtje) in antropogene (izguba, degradacija, fragmentacija habitatov) gonilne sile biodiverzitete.

Seznanijo se s stanjem biodiverzitete v Sloveniji in konvencijami o biodiverziteti

Objectives and competences:

- Students learn the ecological and evolutionary backgrounds of biodiversity.
- Students get knowledge about species biodiversity among taxonomical groups.
- Students get insight of natural (abundance, rarity, extinction) and anthropogenic (habitat loss, degradation, fragmentation) driving forces of biodiversity.

Students get insight about current status of biodiversity in Slovenia and learn about conventions regarding biodiversity.

Predvideni študijski rezultati:

Znanje in razumevanje:

- Študent dobi pregled nad definicijami, pomenom in pomembnostjo biodiverzitete na globalni, EU in nacionalni ravni
- Študent razume naravne in antropogene gonilne sile biodiverzitete in dobi vpogled v vrstno biodiverzitetjo različnih taksonomskih skupin.
- Spozna mednarodne konvencije s področja biodiverzitete

Intended learning outcomes:

Knowledge and understanding:

- Student get an overview on the definitions, meaning and importance of biodiversity on global, EU and national scale.
- Student learn about natural and anthropogenic driving forces of biodiversity, and get insights about species biodiversity in different taxonomical groups.
- Student learn about international conventions regarding biodiversity

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Metode poučevanja in učenja:

- Predavanja
- Seminar

Learning and teaching methods:

- Lectures
- Seminar

Delež (v %) /

Načini ocenjevanja:

Weight (in %)

Assessment:

Način (pisni izpit, ustno izpraševanje, naloge, projekt) <ul style="list-style-type: none"> • Seminarska naloga • Pisni izpit 	50 50	Type (examination, oral, coursework, project): <ul style="list-style-type: none"> • Seminar essay • Written exam
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Reference nosilca / Lecturer's references:

- NOVAK, Tone, PERC, Matjaž, LIPOVŠEK DELAKORDA, Saška, JANŽEKOVIČ, Franc. Duality of terrestrial subterranean fauna. *Int. J. Speleol. (Ed. ital.)*, 2012, vol. 41, no. 2, str. 181-188.
- KRYŠTUFEK, Boris, ŠORGO, Andrej, JANŽEKOVIČ, Franc. Elevational distribution of small terrestrial mammals on Mt. Pohorje, Slovenia = Distribuzione altitudinale di piccoli mammiferi terrestri sul monte Pohorje, Slovenia. *Ann, Ser. hist. nat.*, 2010, vol. 20, št. 2, str. 113-122
- KRYŠTUFEK, Boris, JANŽEKOVIČ, Franc, REŽEK DONEV, Nataša. Elevational diversity of reptiles on two Dinaric mountains. *J. Nat. Hist.*, Feb. 2008, vol. 42, no. 5/8, str. 399-408,
- JANŽEKOVIČ, Franc, KRYŠTUFEK, Boris. Non-volant terrestrial mammals (Mammalia) on the Adriatic island of Korčula. *Ann, Ser. hist. nat.*, 2005, letn. 15, št. 1, str. 121-128.
- JANŽEKOVIČ, Franc, NOVAK, Tone. PCA - a powerful method for analyze ecological niches. V: SANGUANSAT, Parinya (ur.). *Principal component analysis - multidisciplinary applications*. Rijeka: InTech, 2012, str. 127-142.