



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Biodiverziteta Slovenije
Course title:	Biodiversity of Slovenia

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Enovit magistrski študijski program druge stopnje Predmetni učitelj	/	5	9
Five-year master's degree program Subject Teacher	/		

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
45			15		60	4

Nosilec predmeta / Lecturer:

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

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 biodiverziteto 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:**
Prenesljive/ključne spretnosti in drugi atributi:
 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 biodiverziteto različnih taksonomskih skupin.
 - Spozna mednarodne konvencije s področja biodiverzitete

Intended learning outcomes:

- Knowledge and understanding:**
Transferable/Key Skills and other attributes:
 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

Metode poučevanja in učenja:

- Predavanja
- Seminar

Learning and teaching methods:

- Lectures
- Seminar

Načini ocenjevanja:

- Seminarska naloga
- Pisni izpit

Delež (v %) /

Weight (in %)

Assessment:

- Seminar essay
- Written exam

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, JANŽEKVIČ, 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, JANŽEKVIČ, 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,
- JANŽEKVIČ, 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.
- JANŽEKVIČ, 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.