



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet: Izbrana poglavja iz gozdne vegetacije Slovenije
Course title: Selected Topics in Forest Vegetation of Slovenia

| Študijski program in stopnja Study programme and level | Študijska smer Study field | Letnik Academic year | Semester Semester |
|---|-------------------------------|-------------------------|----------------------|
| Doktorski študij Ekološke znanosti, 3. stopnja | | 1. ali 2.; | 1.- 4.; |
| Doctoral Study Ecological Sciences, 3rd degree | | 1st or 2nd | 1st-4th |

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 |
|------------------------|--------------------|------------------|------------------------------|-----------------------------|-------------------------------|------|
| 5 | | 5 | | 20 | 150 | 6 |

Nosilec predmeta / Lecturer:

Andraž Čarni

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

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

Poznavanje rastlin, ekologije in biodiverzitet na ravni univerzitetnega programa

Prerequisites:

Knowledge of plants, ecology and biodiversity at graduate level

Vsebina:

Obravnavana so izbrana poglavja iz naslednjih sklopov.

Predmet se ukvarja z gozdno vegetacijo, predvsem s teorijo in metodami za njeno vzorčenje in obdelavo. Obdelovali bomo predvsem z gozdno vegetacijo Slovenije (floristično sestavo, biodiverzitetno, ekološkimi razmerami itd.), vključili pa bomo tudi

Content (Syllabus outline):

Selected topics in the following chapters are discussed.

Subject deals with forest vegetation of Slovenia, above all with theory and methods of investigation of vegetation. It considers above all forest types of Slovenia (their floristic composition, biodiversity, ecological circumstances etc.), Besides, it will be dealt

nekatero kontaktne negozdne vegetacijske tipe (npr. gozdne robove, poseke), ki se neposredno vključujejo v procese zaraščanja kulturne krajine. Poleg tega se bomo seznanili tudi z delom s velikimi podatkovnimi bazami in s sodobnimi metodami numerične obdelave podatkov ter vrednotenja rezultatov numeričnih analiz. Ukvarjali se bomo tudi s spremembami vegetacije v času in prostoru in z metodami za analizo teh sprememb.. Predmet temelji na standardni srednjeevropski (floristični) metodi za obdelavo vegetacije, vendar bomo pregledali in uporabili tudi druge metode.

with some non-forest communities (e.g. forest edges), that are directly involved in processes of reforestation of cultural landscape. We shall also get acquainted with large database, their elaboration and evaluation of results. We will deal with changes of vegetation cover in time and methods for their investigation and evaluation. The subject is based upon the standard central European (floristic) method, while other methods are applied and evaluated.

Temeljni literatura in viri / Readings:

Čarni A., Marinček L., Seliškar A. & Zupančič M. 2002. Vegetacijska karta gozdnih združb Slovenije v merilu 1 : 400.000. Založba ZRC, Ljubljana (s komentarjam).

Čarni A. 2019. Pregled gozdnih združb Slovenije. Učbenik za izbirni predmet Pregled gozdnih združb Slovenije, FNM, Maribor.

Janssen A. M. et al. 2016. European Red List of Habitats - Part 2. Terrestrial and freshwater habitats. Publication office of EU, Luxembourg.

Leuschner C. & Ellenberg H. 2010. Ecology of Central European forests. Springer, Cham.

Mucina L. et al. 2016. Vegetation of Europe: Hierarchical floristic classification system of vascular plant, bryophyte, lichen, and algal communities. Appl. Veg. Sci. 19: 3–264.

Šilc, U., & Čarni, A. 2012. Conspectus of vegetation syntaxa in Slovenia. Hacquetia 11: 113–164..

Cilji in kompetence:

Podrobno spoznati teorijo in metode za obdelavo gozdne vegetacije
Podroben pregled gozdnih združb v Sloveniji
Podrobna obdelava podatkov o spremembah vegetacije v času in prostoru
Kritična predstavitev različnih metod za preučevanje vegetacije

Objectives and competences:

Detail study of theory and methods of elaboration of forest communities
Advances description of some forest and non forest types in Slovenia
Elaboration of changes in vegetation in space and time
Critical demonstration of various methods in vegetation investigation

Predvideni študijski rezultati:

Intended learning outcomes:

Znanje in razumevanje:

Podobno spoznavanje teorije in metod za obdelavo gozdne vegetacije
 Podrobno proučevanje sprememb vegetacije v času in prostoru
 Podrobno proučevanje vegetacije kot kazalca za spremembe v okolju

Prenesljive/ključne spretnosti in drugi atributi:

Prepoznavanje združb na trenu
 Metodologija vzorčenja in obdelave
 Pridobivanje podrobnega teoretičnega in praktičnega znanja o gozdnih združbah
 Podrobno poznavanje osnovnih tipov gozdne vegetacije Slovenije

Knowledge and understanding:

Advances knowledge of theory and methods of elaboration of forest communities
 Advanced elaboration of changes of vegetation in space and time
 Advanced elaboration of vegetation as an indicator of changes in environment

Transferable/Key Skills and other attributes:

Detailed recognition of communities in the field
 Methodology of sampling and elaboration of vegetation
 Acquisition of detailed theoretical and practical knowledge of forest communities
 Detailed knowledge of basic forest communities

Metode poučevanja in učenja:

Learning and teaching methods:

- Predavanja
- Laboratorijske vaje
- Terensko delo
- Pripava seminarske naloge

- Lectures
- Laboratory excersises
- Field work
- Preparation of essay

Delež (v %) /
 Weight (in %)

| Načini ocenjevanja: | Delež (v %) / Weight (in %) | Assessment: |
|---------------------|--------------------------------|---------------|
| Seminarska naloga | 30% | Seminar essay |
| Pisni izpit | 70% | Written exam |

Reference nosilca / Lecturer's references:

Čarni, A., Čonč, Š., & Valjavec, M. B. (2022). Landform-vegetation units in karstic depressions (dolines) evaluated by indicator plant species and Ellenberg indicator values. *Ecological Indicators*, 135, 108572.

Čarni, A., Čuk, M., Zelnik, I., Franjić, J., Igić, R., Ilić, M., ... & Škvorc, Ž. (2021). Wet meadow plant communities of the alliance *Trifolion pallidi* on the southeastern margin of the Pannonian Plain. *Water*, 13(3), 381.

Čarni, A., Čuk, M., Krstonošić, D., & Škvorc, Ž. (2021). Study of Forage Quality of Grasslands on the Southern Margin of the Pannonian Basin. *Agronomy*, 11(11), 2132.

Kavgacı, A., Balpınar, N., Öner, H. H., Arslan, M., Bonari, G., Chytrý, M., & Čarni, A. (2021). Classification of forest and shrubland vegetation in Mediterranean Turkey. *Applied Vegetation Science*, 24(2), e12589.

Škvorc, Ž., Čuk, M., Zelnik, I., Franjić, J., Igić, R., Ilić, M., ... & Čarni, A. (2020). Diversity of wet and mesic grasslands along a climatic gradient on the southern margin of the Pannonian Basin. *Applied Vegetation Science*, 23(4), 676-697.