



OPIS PREDMETA / SUBJECT SPECIFICATION

Predmet:	Gozdna entomologija
Subject Title:	Forest Entomology

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Biologija in ekologija z naravovarstvom / Biology and ecology with nature conservation	Biologija; Ekologija z naravovarstvom / Biology; Ecology with nature conservation	1	2

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Lab. work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
30	15		15	15	135	7

Nosilec predmeta / Lecturer:

Jeziki /	Predavanja / Lecture:	slovenski / Slovenian
Languages:	Vaje / Tutorial:	slovenski / Slovenian

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

Prerequisites:

Vsebina:

Pri predmetu študenti pridobijo znanja o taksonomiji, morfologiji, biologiji in ekologiji žuželk, ki živijo v gozdu. Spoznajo ekološko in ekonomsko pomembne vrste ter osnove varstva biodiverzitete žuželk.

Kratek povzetek vsebin

- Gozd kot primarni ekosistem (organizacija, delovanje, ekološke sukcesije biocenoz, zoocenoz, biotsko in ekološko ravnotežje, avtekologija ter demekologija žuželk)
- Najpomembnejše skupine žuželk v gozdovih srednje Evrope ter njihov gospodarski pomen
- Osnovne značilnosti skupin Apterygota ter Pterygota (Coleoptera: Scolytidae, Buprestidae, Cerambycidae, Curculionidae; Hymenoptera ter Lepidoptera)
- Biologija in ekologija vrst, ki povzročajo motnje v gozdovih, predvsem s prehranjevanjem ter ukrepanje v smislu varstva gozda
- Invazivne in karantenske vrste žuželk, ki so nevarni za naše gozdove
- Varstvo biodiverzitete žuželk

Contents (Syllabus outline):

Students learn taxonomy, morphology, biology and ecology of insects in forests. They learn about ecologically and economically important species, and about principles of insect diversity conservation.

Short abstract of contents:

- A forest as a primary ecosystem (organization, functioning and ecological successions of biocenoses, zoocenoses, biotic and ecological equilibrium, autecology and demecology of insects).
- The most important groups of insects in forests of central Europe and their economic importance.
- General characteristics of insects groups as Apterygota and Pterygota (Coleoptera: Scolytidae, Buprestidae, Cerambycidae, Curculionidae, Hymenoptera and Lepidoptera).
- Biology and ecology of insects which cause disturbances in forests, particularly by feeding, and preventive measures in the sense of forest protection.
- Invasive and quarantine insects, which are dangerous for our forests.
- Insect diversity conservation.

Temeljni študijski viri / Textbooks:

- Anderson, D. T. (ed.), 2001: Invertebrate zoology.- Second edition. Oxford University Press
- Freude, H., K. W. Harde, G. A. Lohse (eds.), 1965-1984: Die Käfer Mitteleuropas.- Band I-XI, Goecke & Evers Verlag, Krefeld.
- Groom, M. J., G. K. Meffe, C. R. Carroll (Eds.), 2005: Principles of Conservation Biology.- Third Edition, Sinauer.
- Jurc, M., 2005: Gozdna zoologija.- 1. izdaja, Univerzitetni učbenik, Univerza v Ljubljani, Biotehniška fakulteta, Oddelek za gozdarstvo in obnovljive gozdne vire.
- Lieutier, F., K. R. Day, A. Battisti, J.-C. Grégoire, H. F. Evans, 2004: Bark and Wood Boring Insects in Living Trees in Europe, a Synthesis.- Kluwer Academic Publishers.
- Ruppert, E. E. and D. R. Barnes, 1996: Invertebrate zoology.- Sixth edition. Saunders College Publishing.
- Samways, M., 2005: Insect Diversity Conservation. Cambridge University Press.
- Speight, M. C. D., 1989: Saproxylic invertebrates and their conservation. Strasbourg, Council of Europe.

Cilji:

- Spoznajo entomofavno gozdnega ekosistema, predvsem najpomembnejše herbivore vrste žuželk
- Z razumevanjem bionomije, avtekologije in demekologije različnih žuželčnih vrst študentje spoznajo njihovo vlogo in pomen v gozdnem sistemu
- Razumejo potrebe po njihovem ohranjanju

Predvideni študijski rezultati:**Znanje in razumevanje**

- Usvojijo temeljna znanja o živalski komponenti gozdnega ekosistema ter poglobljeno znanje o gozdni entomofavni
- S terenskim delom študentje spoznajo metode nabiranja entomološkega materiala, arhiviranja ter določanja pomembnejših žuželk z uporabo določevalnih ključev
- Razumejo pomen entomofavne v biosferi in potrebe po njeni ohranitvi

Prenesljive/ključne spretnosti in drugi atributi:

- Povezovanje bioloških znanj in znanj varstvene biologije

Metode poučevanja in učenja:

- Predavanja
- Terenske vaje
- Seminarska naloga

Načini ocenjevanja:

- Seminarska naloga
- Pisni izpit

Objectives:

- Percieving of the entomofauna of the forest ecosystem, including the most important herbivorous species of insects
- By understanding the bionomy, autecology, and demecology of various insect species, students learn about their role and importance in forest system
- Understanding the need for their conservation

Intended learning outcomes:**Knowledge and Understanding**

- They acquire basic knowledge of animal component of forest ecosystem and advanced knowledge of entomofauna
- During field work students learn methods of collecting entomological material, making archives, and identifying most important insect species using determination keys
- They understand significance of entomofauna in biosphere, and needs for it conservation

Transferable/Key Skills and other attributes:

- Combinig biological and conservation biology knowledge

Learning and teaching methods:

- Lectures
- Field work
- Seminar essay

Assessment:

- Seminar essay
- Written exam

Delež (v %) /
Weight (in %)50
50

Materialni pogoji za izvedbo predmeta :

- *Multimedijska predavalnica*
- *Trajne raziskovalne ploskve*

Material conditions for subject realization

- *Lecture hall for multimedia presentation*
- *Permanent research plots*

Obveznosti študentov:

(pisni, ustni izpit, naloge, projekti)

- *Seminarska naloga*
- *Pisni izpit*

Students' commitments:

(written, oral examination, coursework, projects):

- *Seminar essay*
- *Written exam*