



OPIS PREDMETA / SUBJECT SPECIFICATION

Predmet:	Sistematika in filogenija nevretenčarjev
Subject Title:	Systematics and phylogeny of Invertebrates

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Biologija /Biology		2	3

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
45			30	15	120	7

Nosilec predmeta /
Lecturer:

Jeziki /
Languages:

Predavanja /
Lecture:

Vaje / Tutorial:

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

Prerequisites:

Vsebina:

Contents (Syllabus outline):

- Principi živalske sistematike
- Protozoa, praživali
- Porifera, spužve. Placozoa, plakozoji
- Cnidaria, ožigalkarji. Ctenophora, rebrače
- Plathelminthes, ploskavci. Mesozoa.
- "Aschelminthes": Cycloneuralia and Gnathifera
- Mollusca, mehkužci
- Nemertea, nitkarji
- Annelida, kolobarniki. Echiurida, zvezdaši
- Arthropoda, členonožci: Trilobitomorpha, Chelicerata,

- Coping with animal diversity
- Protozoa
- Porifera and Placozoa
- Cnidaria and Ctenophora
- Plathelminthe. Mesozoa
- "Aschelminthes": Cycloneuralia and Gnathifera
- Mollusca
- Nemertea
- Annelida. Echiurida.
- Arthropoda: Trilobitomorpha, Chelicerata, Mandibulata (Crustacea, Myriapoda, Hexapoda)
- Lophophorata
- Chaetognatha

Mandibulata (Crustacea, Myriapoda, Hexapoda)

- Lophophorata, lofoforati.
- Chaetognatha, ščetinočeljustnice
- Hemichordata, polstrunarji.
Chordata, strunarji
- Echinodermata, iglokožci
- Evolucija nevretenčarjev

- Hemichordata and Chordata
- Echinodermata
- Patterns of Invertebrate Evolution

Temeljni študijski viri / Textbooks:

- Brusca, R. C., G. J. Brusca, 2002: Invertebrates. 2nd ed. Sinauer, Sunderland.
- Ruppert, E. E., R. D. Barnes, 2002: Invertebrate Zoology. 6th ed. Saunders College Publishing, Philadelphia, New York.
- Ruppert, E.E., Fox R.S., Barnes R.D. (2004). Invertebrate Zoology. A functional evolutionary approach. 7th Ed. Thomson, Victoria, Toronto, London.
- Nielsen, C. 1997: Animal Evolution. Interrelationships of the living Phyla. Oxford University Press, Oxford.
- Sket, B., M. Gogala, V. Kuštor, 2003: Živalstvo Slovenije. Tehniška založba, Ljubljana.

Cilji:

- Predstaviti temeljne skupine nevretenčarjev
- Podati povezavo med gradbenim planom in načinom življenja
- Predstaviti raznolikost in kompleksnost nevretenčarjev
- Podati evlucijski pristop pri študiju nevretenčarjev

Objectives:

- To present fundamental invertebrate groups
- To give the relations between animal "Bauplan" and its environment
- To present diversity and complexity of Animal Kingdom
- To give an evolutionary approach in the study of invertebrates

Predvideni študijski rezultati:

Znanje in razumevanje:

- Povezava med organizacijo živalskega telesa in okoljem živali
- Kompleksnost živalskih skupin
- Poznavanje biodiverzitete na svetovnem nivoju
- Razumevanje glavnih evlucijskih trendov pri nevretenčarjih

Prenesljive/ključne spretnosti in drugi atributi:

Intended learning outcomes:

Knowledge and Understanding:

- Relation between animal organisation and its environment
- Complexity of animal groups
- Knowledge of biodiversity at the global level
- Understanding of the major evolutionary trends in invertebrates

Transferable/Key Skills and other attributes:

- Ability to arrange simple observations

- Sposobnost načrtovati in izvesti preprosta opazovanja in eksperimente na nevretenčarjih
- Sposobnost ovrednotiti rezultate poskusa

- and experiments with invertebrates
- Ability to evaluate results of an experiment

Metode poučevanja in učenja:

Learning and teaching methods:

- Predavanja
- Laboratorijske vaje – individualno eksperimentalno delo

- Lectures
- Laboratory excersises – individual experimental practice

Načini ocenjevanja:

Delež (v %) / **Assessment:**
Weight (in %)

- Kolokvij iz vaj
- Pisni izpit

50
50

- Examination of exercises
- Written examination

Materialni pogoji za izvedbo predmeta :

Material conditions for subject realization

- *Multimedijska predavalnica*
- *Laboratorij za zoologijo*

- *Lecture hall for multimedia presentation*
- *Laboratory for zoology*

Obveznosti študentov:

Students' commitments:

(pisni, ustni izpit, naloge, projekti)

(written, oral examination, coursework, projects):

- Kolokvij iz vaj
- Pisni izpit

- Examination of experimental practice
- Written examination