



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
Ekologija z naravovarstvom /Ecology with Nature Conservation		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

**Nositelj predmeta /
Lecturer:**

Dušan DEVETAK

**Jeziki /
Languages:**

**Predavanja /
Lecture:** slovenski in angleški / Slovenian and English

Vaje / Tutorial: slovenski in angleški / Slovenian and English

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

Prerequisites:

Vsebina:

- 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

Contents (Syllabus outline):

- 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)

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| <ul style="list-style-type: none"> • Arthropoda, členonožci:
Trilobitomorpha, Chelicerata,
Mandibulata (Crustacea, Myriapoda,
Hexapoda) • Lophophorata, lofoforati. • Chaetognatha, ščetinočeljustnice • Hemichordata, polstrunariji.
Chordata, strunariji • Echinodermata, iglokožci • Evolucija nevretenčarjev | <ul style="list-style-type: none"> • Lophophorata • Chaetognatha • Hemichordata and Chordata • Echinodermata • Patterns of Invertebrate Evolution |
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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 evolucijski 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:

Intended learning outcomes:

Znanje in razumevanje:

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

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

Prenesljive/ključne spretnosti in drugi atributi:

Transferable/Key Skills and other attributes:

- Ability to arrange simple observations

<ul style="list-style-type: none"> • Sposobnost načrtovati in izvesti preprosta opazovanja in eksperimente na nevretenčarjih • Sposobnost ovrednotiti rezultate poskusa 	<ul style="list-style-type: none"> and experiments with invertebrates Ability to evaluate results of an experiment
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Metode poučevanja in učenja:

Learning and teaching methods:

<ul style="list-style-type: none"> Predavanja Laboratorijske vaje – individualno eksperimentalno delo 	<ul style="list-style-type: none"> Lectures Laboratory excercises – individual experimental practice
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Načini ocenjevanja:

Delež (v %) / Assessment:

Weight (in %)

<ul style="list-style-type: none"> Kolokvij iz vaj Pisni izpit 	50 50	<ul style="list-style-type: none"> Examination of exercises Written examination
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Materialni pogoji za izvedbo predmeta :

Material conditions for subject realization

<ul style="list-style-type: none"> Multimedija predavalnica Laboratorij za zoologijo 	<ul style="list-style-type: none"> Lecture hall for multimedia presentation Laboratory for zoology
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Obveznosti študentov:

Students' commitments:

<p>(pisni, ustni izpit, naloge, projekti)</p> <ul style="list-style-type: none"> Kolokvij iz vaj Pisni izpit 	<p>(written, oral examination, coursework, projects):</p> <ul style="list-style-type: none"> Examination of experimental practice Written examination
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