



OPIS PREDMETA / SUBJECT SPECIFICATION

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| Predmet: | Izbrana poglavja iz predatorskega vedenja |
| Subject Title: | Selected Topics in Predatory Behaviour |

| Študijski program Study programme | Študijska smer Study field | Letnik Year | Semester Semester |
|---|-------------------------------|--------------------------|------------------------|
| Doktorski študij Ekološke znanosti / Doctoral Study Ecological Sciences | | Izbirni 1 ali 2 ali 3 | 2 ali 3 ali 4 ali 5 |

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 |
|------------------------|--------------------|-----------------------|------------------------|---------------------------|-------------------------------|------|
| 5 | 5 | | | | 140 | 5 |

Nosilec predmeta / Lecturer:

Dušan DEVETAK

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| Jeziki / Languages: | Predavanja / Lecture: Vaje / Tutorial: | slovenski / Slovenian |
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Pogoji za vključitev v delo oz. za opravljanje
študijskih obveznosti:

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| Poznavanje fiziologije in ekologije na ravni univerzitetnega programa ter eksperimentalnih metod v fiziologiji na ravni drugostopenskega programa | Knowledge of physiology and ecology at graduate level, and Knowledge of experimental methods in physiology at master level |
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Vsebina:

Obravnavana so izbrana poglavja iz naslednjih sklopov.

- Zaznavanje plena in njegovo prepoznavanje
- Teorija optimalnega iskanja hrane
- Predator in učinkovitost iskanja hrane
- Vpliv predatorjev in kompetitorjev na optimalno iskanje hrane
- Lov plena; socialnost in lov večjega plena
- Prilagoditev plena na predatorje: zmanjšanje možnosti zaznavanja; zmanjšanje možnosti napada; zmanjšanje možnosti ulova; zmanjšanje možnosti konzumiranja

Prerequisites:

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| Contents (Syllabus outline): |
| <ul style="list-style-type: none"> • Detecting prey and its recognition • Theory of optimal foraging • Predator and foraging efficiency • Role of predators and competitors in optimal foraging • Capturing prey; Sociality and the capture of large prey • Coping with predators adaptively: Making detection less likely. Making an attack less likely. Making capture less likely. Making consumption less likely. |

Temeljni študijski viri / Textbooks:

- Alcock, J., 2005: Animal behavior: an evolutionary approach. 8th ed. Freeman, Sunderland.
- Barrows, E. M., 2003: Animal Behavior Desk Reference. CRC Press, Boston.
- Curio, E., 1976: The ethology of predation. Springer, New York.
- Dugatkin, L. A. (ed.), 2001: Model systems in behavioral ecology. Princeton University Press, Princeton.
- McFarland, D., 1985: Animal Behaviour, Longman, Harlow.

Cilji:

Objectives:

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| <p>Študenti:</p> <ul style="list-style-type: none"> • Podrobno razumejo metode študija vedenja • Podrobno usvojijo znanja za raziskovanje kompleksnosti predatorskega vedenja • Podrobno razumejo evolucijsko spreminjanje predatorskega vedenja • Podrobno spoznajo vlogo predatorjev za evolucijo/ selekcijo plena | <p>Students:</p> <ul style="list-style-type: none"> • Understand advanced methods used in behavioural studies • Acquire advanced knowledge necessary to study complexity of predatory behaviour • Understand in detail evolutionary trends in predatory behaviour • Get acquainted in detail with the role of predators in prey evolution/selection |
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Predvideni študijski rezultati:

Intended learning outcomes:

Znanje in razumevanje:

Študenti:

- Podrobno razumejo povezavo med predatorskim vedenjem in evolucijo
- Podrobno spoznajo kompleksnost predatorskega vedenja
- Podrobno razumejo živčne osnove vedenja
- Podrobno razumejo adaptivno vlogo plastičnosti predatorskega vedenja

Prenesljive/ključne spremnosti in drugi atributi:

- Sposobnost načrtovati in izvesti kompleksne eksperimente za testiranje odzivov živali na kontrolirane spremembe v njenem okolju
- Sposobnost ovrednotiti rezultate kompleksnega etološkega poskusa

Knowledge and Understanding:

Students:

- Understand advanced connection between predatory behaviour and evolution
- Become advanced knowledge of the complexity of predatory behaviour
- Understand in detail the neural basis of behaviour
- Understand in detail the adaptive role of plasticity of predatory behaviour

Transferable/Key Skills and other attributes:

- Ability to arrange complex experiments testing behavioural responses of an animal to controlled changes of its environment
- Ability to evaluate results of a complex behavioural experiment

Metode poučevanja in učenja:

Learning and teaching methods:

- Predavanja
- Laboratorijske vaje – individualno eksperimentalno delo

- Lectures
- Laboratory excercises – individual experimental practice

Načini ocenjevanja:

Delež (v %) /
Weight (in %)

Assessment:

- Kolokvij iz vaj
- Seminarska naloga
- Pisni izpit

- Partial exam of experimental practice
- Seminar essay
- Written exam

Materialni pogoji za izvedbo predmeta :

- Multimedijska predavalnica
- Laboratorij za fiziologijo in etologijo živali

Material conditions for subject realization

- Lecture hall for multimedia presentation
- Laboratory for animal physiology and ethology

Obveznosti študentov:

(pisni, ustni izpit, naloge, projekti)

- Kolokvij iz vaj
- Seminarska naloga
- Pisni izpit

Students' commitments:

(written, oral examination, coursework, projects):

- Partial exam of experimental practice
- Seminar essay
- Written exam