Podiplomskašola ZRCSAZU
Novi trg 2
1000 Ljubljana
T: +386 1 470 64 51

UČNI NAČRT PREDMETA / COURSE SYLLABUS	
Predmet:	IZBRANA POGLAVJA IZ VEDENJSKE BIOLOGIJE
Course title:	SELECTED TOPICS FROM BEHAVIOURAL BIOLOGY

Študijski program in stopnja **Study programme and level**	**Študijska smer** **Study field**	**Letnik** **Academic year**	**Semester** **Semester**
Vede o Zemlji in okolju, magistrski študij 2. stopnje	Biodiverziteta, ekologija in evolucija		
Earth and Environmental Sciences, Master study 2nd level	Biodiversity, ecology and evolution		

Vrsta predmeta / Course type	Izbirni/ Elective
Univerzitetna koda predmeta / University course code:	**MIB04**

Predavanja **Lectures**	**Seminar** **Seminar**	**Sem. vaje** **Tutorial**	**Lab. vaje** **Laboratory work**	**Teren. vaje** **Field work**	**Samost. delo** **Individ. work**	**ECTS**
30	10		5		30	**3**

Nosilec predmeta / Lecturer:	Simona Kralj-Fišer

Jeziki / Languages:	**Predavanja / Lectures:**	angleščina, angleščina / Slovenian, English
	Vaje / Tutorial:	angleščina, angleščina / Slovenian, English

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	**Prerequisites:**
Končan študijski program 1. stopnje ali dodiplomski študijski program za pridobitev univerzitetne izobrazbe, sprejet pred 11. 6. 2004 s področja naravoslovja.	First-cycle Bologna degree or a university degree in the natural sciences.

Vsebina:

- Zgodovina in uvod; proksimalni in distalni vplivi na vedenje
- Metode v vedenjski biologiji
- Biologija agresivnega vedenja
- Biologija razmnoževalnega vedenja (spolni sistemi, spolna selekcija, spolni konflikt)
- Skrb za potomce
- Biologija (pro)socialnega vedenja

Content (Syllabus outline):

- History and introduction; proximate and ultimate causes of behaviour
- Methods in behavioural biology
- Biology of aggressive behaviour
- Biology of reproductive behaviour (mating systems, sexual selection, sexual conflict)
- Biology of parenting behaviour
- Biology of (pro)social behaviour

Temeljni literatura in viri / Readings:

- Alcock, J. (2013). *Animal behavior*: an evolutionary approach. Sinauer Associates. Chapters: 2, 10 – 14.
- Martin, P., & Bateson, P. (2007). *Measuring Behaviour: An Introductory Guide*. Cambridge University Press
- Izbrani aktualni pregledni in izvirni raziskovalni članki iz revij

Cilji in kompetence:

Namen predmeta je seznaniti študente s koncepti študija vedenja, ki ga razumemo kot manifestacijo različnih proksimalnih in distalnih procesov. Razložili bomo osnovne metode raziskav na področju vedenjske biologije. Študentom bomo predstavali izbrana poglavja vedenjske biologije, t.j. biologijo agresivnega, (pro)socialnega vedenja in starševskega vedenja. Poudarek bo na poznavanju spolnih sistemov, paritvenem vedenju, spolni selekciji in spolnem konfliktu. Študetje bodo spoznali raziskovalno delo v vedenjski biologiji in znali kritično interpretirati rezultate.

Objectives and competences:

The purpose of the course is to acquaint students with the concepts of the behavioural biology, which we understand as a manifestation of various proximal and distal processes. We will explain the basic research methods in the field of behavioral biology. Students will be introduced to selected chapters of behavioral biology, i.e. biology of aggressive, (pro) social behavior and parental behavior. The emphasis will be on study of sexual systems, mating behavior, sexual selection, and sexual conflict. Students will learn about research work in behavioral biology and be able to critically interpret results.

Predvideni študijski rezultati:

- Poznavanje temeljnih konceptov v vedenjski biologiji
- Poznavanje metodologije v vedenjski biologiji
- Poznavanje izbranih vsebin s področja vedenjske biologije.
- Sposobnost samostojnega zbiranja vsebin o vedenjski biologiji, njihovo smiselno povezovanje in artikulirano predstavljanje drugim v pisni in ustni obliki (seminar).
- Sposobnost postavitve poskusov in interpretacije vedenjskih rezultatov.
- Poznavanje raziskovalnih trendov v vedenjski biologiji.

Intended learning outcomes:

- Knowledge of basic concepts in behavioural biology
- Knowledge of methodology in behavioural biology
- Knowledge of selected topics in the field of behavioural biology.
- Skills in reading and interpreting literature on behavioural biology, as well as summarizing and presenting these in written and oral forms (seminar).
- Ability to set up experiments and interpret behavioural results.
- Knowledge of research trends in behavioural biology.

Metode poučevanja in učenja:

- Predavanja
- Seminar
- Vaje

Learning and teaching methods:

- Lectures
- Seminar
- Laboratory work

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Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment
• Kratka seminarska naloga, njena predstavitev • Izpit	**50%** **50%**	• Short written seminar and its presentation • Examination

Reference nosilca / Lecturer's references:

1. **Kralj-Fišer, S.,** Čandek, K., Lokovšek, T., Čelik, T., Cheng, R. C., Elgar, M. A., & Kuntner, M. (2016). Mate choice and sexual size dimorphism, not personality, explain female aggression and sexual cannibalism in raft spiders. Animal Behaviour, 111, 49-55.
2. **Kralj-Fišer, S.**, Hebets, E. A., & Kuntner, M. (2017). Different patterns of behavioral variation across and within species of spiders with differing degrees of urbanization. Behavioral Ecology and Sociobiology, 71(8), 125.
3. **Kralj-Fišer, S**., & Gregorič, M. (2019). Spider Welfare. In The Welfare of Invertebrate Animals (pp. 105-122). Springer, Cham.
4. **Kralj-Fišer, S**., Laskowski, K. L., & Garcia-Gonzalez, F. (2019). Sex differences in the genetic architecture of aggressiveness in a sexually dimorphic spider. Ecology and evolution, 9(18), 10758-10766.
5. 5. **Kralj-Fišer, S**., Premate, E., Copilaş-Ciocianu, D., Volk, T., Fišer, Ž., Balázs, G., ... & Fišer, C. (2020). The interplay between habitat use, morphology and locomotion in subterranean crustaceans of the genus Niphargus. Zoology, 139, 125742.