



Univerza v Mariboru

Fakulteta za naravoslovje  
in matematiko

**UČNI NAČRT PREDMETA / COURSE SYLLABUS**

<b>Predmet:</b>	<b>Izbrana poglavja iz biologije sesalcev</b>
<b>Course title:</b>	<b>Selected Topics in Biology of Mammals</b>

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Doktorski študij Ekološke znanosti, 3. stopnja		1. ali 2.; 1st or 2nd	1. 2. ali 3. ; 1st, 2nd or 3rd
Doctoral Study Ecological Sciences, 3rd degree			

**Vrsta predmeta / Course type**

**Univerzitetna koda predmeta / University course code:**

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Lab. vaje Laboratory work	Terenske vaje Field work	Samost. delo Individ. work	ECTS
5				5	140	5

**Nosilec predmeta / Lecturer:**

<b>Jeziki / Languages:</b>	<b>Predavanja / Lectures:</b>	slovenski / slovene
	<b>Vaje / Tutorial:</b>	slovenski / slovene

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

**Prerequisites:**

**Vsebina:**

Obravnavana izbranih poglavij iz naslednjih sklopov.

Značilnosti sesalcev.  
Oblika funkcija in adaptivna radiacija.  
Sistematika sesalcev.  
Vedenje in komunikacija.  
Vedenje in okolje.  
Razmnoževanje in razvoj.  
Populacijska dinamika in varovanje.

**Content (Syllabus outline):**

Selected topics in the following chapters are discussed.

Characteristics of mammals.  
Adaptive radiation of forms and functions.  
Systematics of mammals.  
Behavior and communication.  
Behavior and environment.  
Reproduction and development.  
Population dynamics and conservation.

**Temeljni literatura in viri / Readings:**

Kryštufek B. 1991. Sesalci Slovenije. PMS. Ljubljana.  
Niethammer J., Krapp F., 1978. Handbuch der Säugetiere Europas. Akademische Verlagsgesellschaft. Wiesbaden.  
Pough F.H., Janis C.M., Heiser J.B., 2005. Vertebrate Life. Pearson Education International. New Jersey.  
Vaughan T.A., Ryan J.M., Czaplewski N.J., 2010. Mammalogy. Thomson Learning. London.

**Cilji in kompetence:**

Podrobno razumevanje diagnostičnih značilnosti sesalcev.  
Podrobno razumevanje odnosov med obliko, funkcijo in adaptivno radiacijo.  
Podrobno razumevanje sistematike sesalcev.  
Podrobno razumevanje vedenja in komunikacije med sesalci.  
Podrobno razumevanje odnosov med vedenjem in okoljem.  
Podrobno poznavanje razmnoževanja in ontogenije sesalcev.  
Podrobno poznavanje metod in tehnik merjenja populacijske dinamike in varovanja sesalcev.

**Objectives and competences:**

Knowledge diagnostic characteristics of mammals.  
Advanced understanding relationship among form, function and adaptive radiation.  
Advanced knowledge of mammal systematics.  
Advanced understanding behavior and communication among mammals.  
Advanced understanding relationship between mammal behavior and environment.  
Advanced knowledge of reproduction and mammal ontogeny.  
Advanced knowledge of methods and techniques of population dynamics measuring and mammals conservation.

**Predvideni študijski rezultati:****Znanje in razumevanje:**

Podrobne povezave med organizacijo sesalčjega telesa in njegovim okoljem.  
Podrobno poznavanje biodiverzitete sesalcev na regionalnem in svetovnem nivoju.  
Podrobno razumevanje metod in tehnik merjenja sesalčjih populacij.  
Podrobno poznavanje naravovarstvene problematike sesalcev.

**Prenesljive/ključne spretnosti in drugi atributi:**

Sposobnost načrtovanja in izvedbe najzahtevnejših opazovanj in eksperimentov na sesalcih.  
Sposobnost najzahtevnejšega načrtovanja in uravljanja s selčjimi populacijami.

**Intended learning outcomes:****Knowledge and understanding:**

Relations between mammals body and its environment.  
Knowledge of mammals biodiversity at the regional and global level.  
Understanding methods and techniques of mammals population measuring.  
Knowledge of the conservation problems.

**Transferable/Key Skills and other attributes:**

Ability to arrange exacting observations and experiments on mammals.  
Ability to arrange exacting observations and managing on mammals population.

**Metode poučevanja in učenja:****Learning and teaching methods:**

Predavanja Terensko delo	Lectures Field work
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Delež (v %) /

**Načini ocenjevanja:**

Weight (in %)

**Assessment:**

Seminarska naloga	50	Seminar essay
Ustni izpit	50	Oral exam

**Reference nosilca / Lecturer's references:**

KLENOVŠEK, Tina, NOVAK, Tone, ČAS, Miran, TRILAR, Tomi, **JANŽEKovič, Franc**. Feeding ecology of three sympatric Sorex shrew species in montane forests of Slovenia. *Folia Zoologica*, ISSN 0139-7893 0139-7893, 2013, vol. 62, no. 3, str. 193-199, ilustr. [COBISS.SI-ID [3707046](#)]

LIPOVŠEK DELAKORDA, Saška, **JANŽEKovič, Franc**, LEITINGER, Gerd, RUPNIK, Marjan. Rab3a ablation related changes in morphology of secretory vesicles in major endocrine pancreatic cells, pituitary melanotroph cells and adrenal gland chromaffin cells in mice. *General and comparative endocrinology*, ISSN 0016-6480, 2013, vol. 185, str. 67-79.

<http://dx.doi.org/10.1016/j.ygcen.2013.01.007>. [COBISS.SI-ID [19733768](#)]

KRYŠTUFEK, Boris, KLENOVŠEK, Tina, VARLIJEN BUŽAN, Elena, LOY, Anna, **JANŽEKovič, Franc**. Cranial divergence among evolutionary lineages of Martino's vole, *Dinaromys bogdanovi*, a rare Balkan paleoendemic rodent. *Journal of mammalogy*, ISSN 0022-2372, 2012, vol. 93, iss. 3, str. 818-825, doi: [10.1644/11-MAMM-A-260.2](https://doi.org/10.1644/11-MAMM-A-260.2). [COBISS.SI-ID [19312904](#)]

KRYŠTUFEK, Boris, ŠORGO, Andrej, **JANŽEKovič, Franc**. Elevational distribution of small terrestrial mammals on Mt. Pohorje, Slovenia = Distribuzione altitudinale di piccoli mammiferi terrestri sul monte Pohorje, Slovenia. *Annales, Series historia naturalis*, ISSN 1408-533X, 2010, vol. 20, št. 2, str. 113-122, ilustr. [COBISS.SI-ID [18189576](#)]