University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/

Course name: English Language for PhD Students 1

AJD1/07

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 1.

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 525

N	Ne	P	Pr	abs	neabs
0.0	0.0	58.29	0.0	41.71	0.0

Provides: PhDr. Helena Petruňová, CSc., Mgr. Zuzana Kolaříková, PhD.

Date of last modification: 04.10.2016

Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik

Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/

Course name: English Language for PhD Students 2

AJD2/07

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 3

Recommended semester/trimester of the course: 2.

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 528

N	Ne	P	Pr	abs	neabs
0.0	0.0	91.86	1.52	6.63	0.0

Provides: PhDr. Helena Petruňová, CSc., Mgr. Zuzana Kolaříková, PhD.

Date of last modification: 04.10.2016

Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc. Guaranteeprof. RNDr. Beňadik

Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ BSM/04			
Course type, scope a Course type: Practic Recommended cour Per week: Per stud Course method: pre	ce rse-load (hours): ly period: 20s		
Number of credits: 5	5		
Recommended seme	ester/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ature:		
Course language:			
Course assessment Total number of asse	ssed students: 13		
	N	P	
	0.0 100.0		
Provides: prof. RND:	r. Beňadik Šmajda, CSc.		
Date of last modifica	ntion: 24.02.2017		
S	nteedoc. RNDr. Monika Karanteedoc. MVDr. Mária Mi	ssayová, CSc.Guaranteeprof. RNDr. Beňadik klošová, PhD.	

University: P. J. Šafá	rik University in Koš	iice		
Faculty: Faculty of S	cience			
Course ID: ÚBEV/ CDC/04				
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:			
Number of credits: 5	; 			
Recommended seme	ster/trimester of the	e course:		
Course level: III.				
Prerequisities:				
Conditions for cours	se completion:			
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended liters	Recommended literature:			
Course language:				
Course assessment Total number of asses	ssed students: 5			
	abs	n		
	100.0 0.0			
Provides:		·		
Date of last modifica	ation: 24.02.2017			
Approved: Co-guara		ika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ CM/04			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2	20		
Recommended seme	ster/trimester of the course:		
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 0		
Provides:			
Date of last modifica	ation: 24 02 2017		

Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik

Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ | Course n

CRO1/03

Course name: Chronophysiology

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 5

Recommended semester/trimester of the course:

Course level: II., III.

Prerequisities:

Conditions for course completion:

Oral examination.

Learning outcomes:

To outline the problematics of the time organisation of biological processes and their significance in evolution of living organisms

Brief outline of the course:

Time structure of physiological variables in animals and man. Basic notions and categories of biological rhythms. The significance of biological rhythms in the evolution of living things. The genetic basis and molecular mechanisms of biological clocks in animals. The endogenous character of biological rhythms. The multioscillatory system of the organism. The significance of circadian and seasonal rhthms for the animal and human life. The application of chrono-physiological principles.

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 82

A	В	С	D	Е	FX	N	P
21.95	21.95	29.27	10.98	4.88	0.0	0.0	10.98

Provides: prof. RNDr. Beňadik Šmajda, CSc., RNDr. Natália Pipová, PhD.

Date of last modification: 24.02.2017

Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.

University: P. J. Šafá	rik University in K	ošice	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ CZC/04	\mathbf{J}		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	0		
Recommended seme	ster/trimester of t	he course:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the course:			
Recommended literature:			
Course language:			
Course assessment Total number of asse	ssed students: 33		
	abs	n	
100.0 0.0			
Provides:		·	
Date of last modifica	ntion: 24.02.2017		
,		onika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik	

University: P. J. Šafá	rik University in Koši	ce	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DK/04			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2	2		
Recommended seme	ster/trimester of the	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asses	ssed students: 125		
	abs	n	
	100.0 0.0		
Provides:		•	
Date of last modifica	ition: 24.02.2017		
S	nteedoc. RNDr. Monik ranteedoc. MVDr. Már	ka Kassayová, CSc.Guaranteeprof. RNDr. Beňadik ria Miklošová, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DKC/04			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	5		
Recommended seme	ster/trimester of the cou	rse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 16		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	tion: 24.02.2017		
	nteedoc. RNDr. Monika K anteedoc. MVDr. Mária N	assayová, CSc.Guaranteeprof. RNDr. Beňadik Iiklošová, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DKZU/04			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 4			
Recommended seme	ster/trimester of the co	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ture:		
Course language:			
Course assessment Total number of asse	ssed students: 105		
	abs	n	
	100.0 0.0		
Provides:		<u> </u>	
Date of last modifica	tion: 24.02.2017		
U	nteedoc. RNDr. Monika anteedoc. MVDr. Mária	Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Miklošová, PhD.	

University: P. J. Šafárik University in Košice				
Faculty: Faculty of S	Faculty: Faculty of Science			
Course ID: ÚBEV/ DNC/04	· · · · · · · · · · · · · · · · · · ·			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:			
Number of credits: 5	;			
Recommended seme	ster/trimester of the cours	se:		
Course level: III.				
Prerequisities:				
Conditions for cours	e completion:			
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended litera	Recommended literature:			
Course language:				
Course assessment Total number of asse	ssed students: 37			
	abs	n		
	100.0 0.0			
Provides:				
Date of last modification: 24.02.2017				
Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.				

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DZP1a/04			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	0		
Recommended seme	ster/trimester of the co	urse: 6.	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of asse	ssed students: 33		
	abs	n	
	100.0 0.0		
Provides:		•	
Date of last modifica	ntion: 24.02.2017		
U	nteedoc. RNDr. Monika ranteedoc. MVDr. Mária	Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Miklošová, PhD.	

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DZP1b/04	Course name: Doctoral Thesis		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 3	30		
Recommended seme	ster/trimester of the	course: 8.	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the course:			
Recommended literature:			
Course language:			
Course assessment Total number of asse	ssed students: 55		
	abs n		
100.0 0.0			
Provides:		•	
Date of last modifica	ation: 24.02.2017		
Approved: Co-guara Šmajda, CSc.Co-guar		ka Kassayová, CSc.Guaranteeprof. RNDr. Beňadik ria Miklošová, PhD.	

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DZS/14			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 5	; 		
Recommended seme	ster/trimester of the	course:	
Course level: III.			
Prerequisities: ÚBE	V/VEK3/11		
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ture:		
Course language:			
Course assessment Total number of asse	ssed students: 34		
	N	P	
	2.94 97.06		
Provides:			
Date of last modifica	tion: 24.02.2017		
Approved: Co-guara: Šmajda, CSc.Co-guar		ka Kassayová, CSc.Guaranteeprof. RNDr. Beňadik ria Miklošová, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ EFYZ/04	BEV/ Course name: Environmental physiology		
Course type, scope a Course type: Practic Recommended cour Per week: Per stud Course method: pre	ce rse-load (hours): ly period: 15s		
Number of credits: 4	ļ		
Recommended seme	ster/trimester of the co	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	course:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of asses	ssed students: 7		
	N	P	
	0.0 100.0		
Provides:			
Date of last modifica	ntion: 24.02.2017		
I ~	nteedoc. RNDr. Monika ranteedoc. MVDr. Mária	Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Miklošová, PhD.	

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ | Course name

EKC1/00

Course name: Ecology of mammals

Course type, scope and the method:

Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 1 Per study period: 14 / 14

Course method: present

Number of credits: 3

Recommended semester/trimester of the course:

Course level: II., III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

To understand a) ekological position of mammal groups in ecosystems and their importance in ecological networks; b) anthropogenic impacts on mammals and their coenoses; c) population ecology of some mammal groups

Brief outline of the course:

Factors of environment. Temperature. Water. Snow. Light. Adaptations. Hypothermy. Hibernation, aestivation, letargy. Reseources. Food. Food strategies and specialistaions. Habitat and nika. Interactions. Komensalism. Mutualism. Kooperation. Competion. Predator and prey. Mammals and plants. Food webs. Teritoriality. Home range. Lek. Metapopulations. Reproduction. Mating systems. Oestrus. r- and K- strategy. Monogamy, polygamy. Dispersion. Migration. Habitat selection. Individual. Population. Natality, mortality. Kohorts. Population dynamics and cycles. Gradations. Mammal diversity. Island biogeografy. Macroecology. Gradients. Long-term studies. Habitat fragmentations. Synanthropy. Conservation of mammals. Wind energy. Mammal introductions. Repatriations, reintroductions. Expansions. Global climate changes and mammals. Protected areas. Vulneralble species. Minimal viable population.

Recommended literature:

Feldhamer G., Drickamer L., Vessey SH., Merritt JF., 2000. Mammalogy: Adaptation, Diversity and Ecology. McGraw Hill Hardback, 563 pp.

Vlasák P., 1986. Ekologie cicavcu. Academia, Praha, 292 pp.

Course language:

Course assessment

Total number of assessed students: 233

A	В	C	D	Е	FX	N	P
61.37	18.88	12.88	2.58	2.58	0.0	0.0	1.72

Provides: doc. RNDr. Marcel Uhrin, PhD.

Date of last modification: 24.02.2017

Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Endocrinology **END/04** Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 Per study period: 14 / 0s Course method: present Number of credits: 3 Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion:** Oral examination. **Learning outcomes:** To broaden the student's knowledge of endocrine organ and tissue function at all levels of the animal and human organism **Brief outline of the course:** Chemical structure of hormones, general principles of hormone action. Hormone biosynthesis, secretion, transport and degradation. Hormone-receptor interaction, receptor types, transmission of hormonal signal into the cell. Neuroendocrinology, hypothalamic-pituitary system. Hormones of thyroid gland, regulation of thyroid secretion. Parathyroid glands, hormonal regulation of calcium and phosphorus homeostasis. Hormones of adrenal glands – adrenal cortex and medulla. Pancreatic islets, regulation of metabolic processes. Hormones and regulatory peptides of gastrointestinal tract. Neuroendocrine regulation of food intake and body mass, endocrine activity of adipose tissue. Hormones of male and female reproduction, hormonal regulation of pregnancy and lactation. Pineal gland. Principles of hormonal integration **Recommended literature:** 1. Goodman H.M.: Basic Medical Endocrinology. Academic Press 2009 2. Jameson J.L.: Harrison's Endocrinology. McGraw-Hill Companies Inc., 2010 3. Gardner D.G., Shoback D.: Greenspan's Basic and Clinical Endocrinology. McGraw-Hill Companies Inc., 2011 Course language: Course assessment Total number of assessed students: 8 N P

100.0

Provides: doc. RNDr. Monika Kassayová, CSc.

Date of last modification: 24.02.2017

0.0

Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.

University: P. J. Šafá	University: P. J. Šafárik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ ETO/04			
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 15s Course method: present			
Number of credits: 4			
	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of assessed students: 12			
	N	P	
	0.0 100.0		
Provides: RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD.			
Date of last modification: 24.02.2017			
Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.			

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ C

Course name: Experimental oncology

EXON/04

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 15 Per study period: 210

Course method: present

Number of credits: 5

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Oral examination.

Learning outcomes:

To clarify the general mechanism and principles of neoplastic transformation and possibilities of its modulation in experimental animals.

Brief outline of the course:

Stages of malignant transformation. Modulation of signal transduction in carcinogenesis, oncogenes, tumor suppressor genes. Modulation of malignant transformation by environmental factors. Possibilities of cancer disease prevention. Testing of chemopreventive substances. In vitro and in vivo models used in experimntal oncology

Recommended literature:

Weinberg R.A, The biology of cancer. Garland Science, Taylor and Francis Group, LLC, 2007. Scientific journal articles.

Course language:

Course assessment

Total number of assessed students: 8

N	P
0.0	100.0

Provides: doc. RNDr. Bianka Bojková, PhD.

Date of last modification: 24.02.2017

Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.

University: P. J. Šafá	University: P. J. Šafárik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ FYZ/04	Course name: Animal and Human Physiology		
Course type, scope a Course type: Practic Recommended cour Per week: Per stud Course method: pre	ce rse-load (hours): ly period: 15s esent		
Number of credits: 6	<u> </u>		
Recommended seme	ster/trimester of the cours	e: 1.	
Course level: III.	Course level: III.		
Prerequisities:			
Conditions for cours	Conditions for course completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:	Course language:		
Course assessment Total number of assessed students: 50			
	N P		
0.0 100.0			
Provides: prof. RNDr. Beňadik Šmajda, CSc.			
Date of last modification: 24.02.2017			
Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.			

University: P. J. Šafá	University: P. J. Šafárik University in Košice			
Faculty: Faculty of S	cience			
Course ID: ÚBEV/ IG/04	Course name: Receiving a grant under Internal Scientific Grant System (VVGS)			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period: esent			
Number of credits: 1	0			
Recommended seme	ster/trimester of the cou	rse: 6., 8.		
Course level: III.				
Prerequisities:				
Conditions for cours	se completion:			
Learning outcomes:	Learning outcomes:			
Brief outline of the c	ourse:			
Recommended litera	nture:			
Course language:	Course language:			
Course assessment Total number of asse	ssed students: 142			
	abs	n		
	100.0 0.0			
Provides:				
Date of last modifica	ation: 24.02.2017			
U	nteedoc. RNDr. Monika K anteedoc. MVDr. Mária N	assayová, CSc.Guaranteeprof. RNDr. Beňadik Iiklošová, PhD.		

University: P. J. Šafá	rik University in Ko	šice		
Faculty: Faculty of S	cience			
Course ID: ÚBEV/ IMU/04	$\mathcal{L}_{\mathcal{I}}$			
Course type, scope a Course type: Practi Recommended cou Per week: Per stud Course method: pro	ce rse-load (hours): ly period: 20s			
Number of credits: 3	5			
Recommended seme	ster/trimester of th	e course:		
Course level: III.				
Prerequisities:				
Conditions for cours	se completion:			
Learning outcomes:				
Brief outline of the o	course:			
Recommended litera	ature:			
Course language:				
Course assessment Total number of asse	ssed students: 28			
	N		P	
	0.0 100.0			
Provides: RNDr. Vla	sta Demečková, PhI).		
Date of last modifica	ntion: 24.02.2017		-	
Approved: Co-guara		•	Sc.Guaranteeprof. RNDr. B	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: Dek. PF UPJŠ/JSD/14	ourse ID: Dek. PF Course name: Spring School for PhD Students PJŠ/JSD/14		
Course type, scope a Course type: Lectur Recommended cour Per week: Per stud Course method: pre	re rse-load (hours): ly period: 4d		
Number of credits: 2	2		
Recommended seme	ster/trimester of the course	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	ourse:		
Recommended literature:			
Course language:			
Course assessment Total number of asse	ssed students: 115		
	abs	n	
	100.0 0.0		
Provides: doc. RNDr. Vladimír Zeleňák, PhD.			
Date of last modifica	tion: 13.02.2017		
1	nteedoc. RNDr. Monika Kas ranteedoc. MVDr. Mária Mik	ssayová, CSc.Guaranteeprof. RNDr. Beňadik klošová, PhD.	

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ | Course name: Cell Metabolism

MET/04

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 Per study period: 28 / 0s

Course method: present

Number of credits: 5

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Oral examination

Learning outcomes:

Broadening of the basic knowledge of metabolic processes for homeostasis maintenance in animal and human organism

Brief outline of the course:

Carbohydrates – structure, biological significance of mono-, di-, polysaccharides and its derivatives, pathways of carbohydrate synthesis and degradation, glycaemia regulation, clinical aspects of carbohydrate metabolism. Lipids – categories, metabolism, lipogenesis, lipolysis, the metabolic roles of the liver and adipose tissue. Ketogenesis. Regulation of carbohydrate and lipid metabolism. Plasma lipoprotein metabolism, hyper- and hypolipoproteinemias. Cholesterol metabolism, biochemical and clinical aspects of atherogenesis and atherosclerosis. Arachidonic acid – biological significance, formation and functions of eicosanoids, clinical correlations. Reactive oxygen and nitrogen species, oxidative metabolism, antioxidative systems. Metabolic pathways of protein degradation and amino acid transformation, special products of amino acid metabolism. Nitrogen metabolism, urea biosynthesis. Metabolism of porphyrins, purines and pyrimidines. Water metabolism and its disturbances. Metabolism of solutes. Mechanisms of metabolic processes regulation.

Recommended literature:

- 1. Devlin T.M.: Textbook of Biochemistry with Clinical Correlations. Wiley-Liss 2006
- 2. Bhagavan N.V., Chung-Eun Ha: Essentials of Medical Biochemistry. Elsevier 2011
- 3. Newsholme E., Leech T.: Functional Biochemistry in Health and Disease. Wiley-Blackwell 2010

Course language:

Course assessment

Total number of assessed students: 26

Total named of assessed statems. 20		
N	P	
0.0	100.0	

Provides: doc. RNDr. Monika Kassayová, CSc.

Date of last modification: 24.02.2017

Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik

Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ MK/04			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 6	5		
Recommended seme	ster/trimester of the co	urse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 186		
	abs n		
100.0 0.0			
Provides:			
Date of last modifica	tion: 24.02.2017		
	nteedoc. RNDr. Monika anteedoc. MVDr. Mária	Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Miklošová PhD	

University: P. J. Šafá	rik University in Košice	;	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ NEM/04	Course name: Implementation of new experimental methodology		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	15		
Recommended seme	ster/trimester of the co	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	course:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of asse	ssed students: 69		
	abs	n	
	100.0 0.0		
Provides:		<u> </u>	
Date of last modifica	ntion: 24.02.2017		
U	nteedoc. RNDr. Monika anteedoc. MVDr. Mária	Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Miklošová, PhD.	

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Course na

Course name: Neuronal basis of behavior.

NEU/04

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: Per study period: 15s

Course method: present

Number of credits: 6

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Oral examination.

Learning outcomes:

To provide students with the most recent knowledge on the biological basis of behaviour.

Brief outline of the course:

Neuronal mechanisms of learning and memory. Neurochemistry of emotions. The role of the left and right hemispheres in control of various types of behaviour. Neurodegenerative processes in the CNS. Biological basis of patological deviations of behaviour in humans. Neurophysiology of addiction.

Recommended literature:

A. Wickens: Foundations of Biopsychology. Pearson/Prentice Hall, Harlow, London,...,2005.

T.J.Carew: Behavioral Neurobiology. Sinauer Assoc., Sunderland (USA), 2000.

R.P.Kesner, J.L.Martinez: Neurobiology of learning and memory. Academic Press, Elsevier,

Amsterdam,...,2007.

Course language:

Course assessment

Total number of assessed students: 11

N	P
0.0	100.0

Provides: prof. RNDr. Beňadik Šmajda, CSc.

Date of last modification: 24.02.2017

Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik

Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.

University: P. J. Šafá	rik University in Košio		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ NZ/04	Course name: Non-reviewed collections of papers and monographs published abroad or in the country of residence		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2			
Recommended seme	ster/trimester of the	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 108		
	abs	n	
	100.0 0.0		
Provides:		·	
Date of last modifica	tion: 24.02.2017		
	nteedoc. RNDr. Monik ranteedoc. MVDr. Már	ka Kassayová, CSc.Guaranteeprof. RNDr. Beňadik ia Miklošová, PhD.	

University: P. J. Šafá	rik University in Košic	e	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ ODZP/14			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 3	30		
Recommended seme	ster/trimester of the c	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asses	ssed students: 27		
	N	P	
	0.0 100.0		
Provides:			
Date of last modifica	ntion: 24.02.2017		
I ~	nteedoc. RNDr. Monika anteedoc. MVDr. Mári	a Kassayová, CSc.Guaranteeprof. RNDr. Beňadik a Miklošová, PhD.	

University: P. J. Šafá	rik University in Koš	śice	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ PDS/14	D: ÚBEV/ Course name: Writing Dissertation Work		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	.5		
Recommended seme	ster/trimester of the	e course:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 37		
	abs	n	
	100.0 0.0		
Provides:		·	
Date of last modifica	ition: 24.02.2017		
Approved: Co-guara: Šmajda, CSc.Co-guar		ika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik ária Miklošová, PhD.	

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Cours

Course name: Comparative animal physiology

PFYZ/15

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 3

Recommended semester/trimester of the course:

Course level: II., III.

Prerequisities:

Conditions for course completion:

Performance of oral examination.

Learning outcomes:

The students receive an overview on the significance of physiological adaptational mechanisms to the various life conditions on the individual levels of the phylogenesis.

Brief outline of the course:

Phylogeny of food acquisition, processing and utilization in animals. Energy metabolism (factors influencing the metabolic rate; physiology of physical work; principles of aerobic performance in various species). Thermal housekeeping (poikilothermic and homoiothermic strategies, life in cool environment). The phylogenic development of the nervous system. Sensoric abilities of the animals. Evolution of the brain. Endocrinal and neuroendocrinal regulation of body functions in evertebrates and vertebrates. Reproductive systems of the animals. Navigation in animals. Motoric basicss of animal behaviour. The mechanisms of the exchange of respiratory gases in a phylogenetic view. Comparison of the circulatory systems in animals. Water- and mineral housekeeping in terrestrial and aquatic animals. Excretory systems of the animals.

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 12

A	В	С	D	Е	FX	N	P
50.0	25.0	0.0	8.33	0.0	0.0	0.0	16.67

Provides: prof. RNDr. Beňadik Šmajda, CSc.

Date of last modification: 24.02.2017

Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmajda, CSc.Co-guaranteedoc. MVDr. Mária Miklošová, PhD.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ PVS/04	ÚBEV/ Course name: Author's patents, discoveries, software		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2	2		
Recommended seme	ster/trimester of the cou	rse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of asse	ssed students: 1		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	ation: 24.02.2017		
U 1 1	nteedoc. RNDr. Monika k anteedoc. MVDr. Mária N	assayová, CSc.Guaranteeprof. RNDr. Beňadik Iiklošová, PhD.	

University: P. J. Šafá	rik University in Košice	:	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ RBI/04			
Course type, scope a Course type: Practic Recommended cour Per week: Per stud Course method: pre	ce rse-load (hours): ly period: 15s esent		
Number of credits: 4			
	ester/trimester of the co	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	course:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 0		
	N	P	
	0.0		
Provides: prof. RND	r. Beňadik Šmajda, CSc		
Date of last modifica	ntion: 24.02.2017		
	nteedoc. RNDr. Monika ranteedoc. MVDr. Mária	Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Miklošová, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ RZ/04	ID: ÚBEV/ Course name: Peer-reviewed collections of papers and monographs published abroad or in the country of residence		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 5	5		
Recommended seme	ster/trimester of the cou	rse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 242		
	abs	n	
	100.0 0.0		
Provides:		•	
Date of last modifica	tion: 24.02.2017		
1	nteedoc. RNDr. Monika k anteedoc. MVDr. Mária N	Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Miklošová, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ SCI/04	Course name: Citation registered in Science Citation Index		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2	20		
Recommended seme	ster/trimester of the cou	rse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 38		
	abs	n	
	100.0 0.0		
Provides:		-	
Date of last modifica	tion: 24.02.2017		
1011	nteedoc. RNDr. Monika k anteedoc. MVDr. Mária N	Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Miklošová, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ SDPR/04	: ÚBEV/ Course name: Co-worker of project supported by national grant schemes		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 2			
Recommended seme	ster/trimester of the cours	se:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ture:		
Course language:			
Course assessment Total number of asses	ssed students: 364		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	tion: 24.02.2017		
,	nteedoc. RNDr. Monika Ka anteedoc. MVDr. Mária Mi	ssayová, CSc.Guaranteeprof. RNDr. Beňadik klošová, PhD.	

University: P. J. Šafá	rik University in Košic	e	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ SMPR/04			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	.5		
Recommended seme	ster/trimester of the c	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 38		
	abs n		
	100.0 0.0		
Provides:		·	
Date of last modifica	ation: 24.02.2017		
	nteedoc. RNDr. Monik	a Kassayová, CSc.Guaranteeprof. RNDr. Beňadik	

University: P. J. Šafárik University in Košice			
Faculty: Faculty of Science			
Course ID: ÚBEV/ SSOL/04	Course name: Samostatné štúdium odbornej literatúry		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2			
Recommended seme	ster/trimester of the co	urse:	
Course level: III.			
Prerequisities:			
Conditions for course completion:			
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 224		
	abs	n	
	100.0	0.0	
Provides:			
Date of last modification: 24.02.2017			
Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmaida. CSc.Co-guaranteedoc. MVDr. Mária Miklošová. PhD.			

University: P. J. Šafá	rik University in Koši	ce	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ VYS/04	Course name: Talk given at scholar seminars of department or institute		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2			
Recommended semester/trimester of the course:			
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	course:		
Recommended litera	ature:		
Course language:	Course language:		
Course assessment Total number of asse	ssed students: 200		
	abs	n	
	100.0	0.0	
Provides:		·	
Date of last modification: 24.02.2017			
Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmaida, CSc Co-guaranteedoc, MVDr. Mária Miklošová, PhD			

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚBEV/ ZKC/04	Course name: Journals registered in the Current Contents Connect database and published abroad		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of credits: 2	.0		
Recommended seme	ster/trimester of the co	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asses	ssed students: 214		
	abs	n	
	100.0	0.0	
Provides:		•	
Date of last modification: 24.02.2017			
1	nteedoc. RNDr. Monika ranteedoc. MVDr. Mária	Kassayová, CSc.Guaranteeprof. RNDr. Beňadik a Miklošová, PhD.	

University: P. J. Šafá	rik University in Košio	ce	
Faculty: Faculty of Science			
Course ID: ÚBEV/ ZNC/04	Course name: Journals not registered in the Current Contents Connect database and published abroad		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 5			
Recommended seme	ster/trimester of the	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of assessed students: 48			
	abs	n	
	100.0	0.0	
Provides:			
Date of last modification: 24.02.2017			
Approved: Co-guaranteedoc. RNDr. Monika Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Šmaida, CSc.Co-guaranteedoc, MVDr. Mária Miklošová, PhD			

University: P. J. Šafá	University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚBEV/ ZSP/04	Course name: Realisation of study/research stay abroad		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2			
Recommended semester/trimester of the course: 6., 8.			
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 84		
	abs	n	
	100.0	0.0	
Provides:		<u> </u>	
Date of last modifica	ition: 24.02.2017		
	nteedoc. RNDr. Monika ranteedoc. MVDr. Mária	Kassayová, CSc.Guaranteeprof. RNDr. Beňadik Miklošová, PhD.	