CONTENT

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ FYZ/04	**Course name:** Animal and Human Physiology
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 15s **Course method:** present	
Number of ECTS credits: 6	
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:	
Notes:	

Course assessment
Total number of assessed students: 60

N	P
0.0	100.0

Provides: prof. RNDr. Beňadik Šmajda, CSc.
Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ PVS/04	**Course name:** Author's patents, discoveries, software
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment

Total number of assessed students: 1

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ BSM/04	**Course name:** Biochemistry of signal molecules.
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 20s **Course method:** present	
Number of ECTS credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 16	

N	P
0.0	100.0

Provides: prof. RNDr. Beňadik Šmajda, CSc.
Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ MET/04	**Course name:** Cell Metabolism

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 ECTS 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:

Notes:

Course assessment Total number of assessed students: 35	
N	P
0.0	100.0
Provides: doc. RNDr. Monika Kassayová, CSc.	
Date of last modification: 03.05.2015	
Approved: prof. RNDr. Beňadik Šmajda, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ 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 ECTS 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:

Notes:

Course assessment
Total number of assessed students: 89

A	B	C	D	E	FX	N	P
21.35	21.35	29.21	12.36	4.49	0.0	0.0	11.24

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

Date of last modification: 03.05.2015

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ CM/04	**Course name:** Citation in monograph
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 20	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 0	
Provides:	
Date of last modification:	
Approved: prof. RNDr. Beňadik Šmajda, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ CZC/04	**Course name:** Citation in scientific journal published abroad
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 10	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 48

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ CDC/04	**Course name:** Citation in scientific journal published in the country of residence
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment

Total number of assessed students: 6

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ SCI/04	**Course name:** Citation registered in Science Citation Index
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 20	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 69	

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ SMPR/04	**Course name:** Co-worker of project supported by international grant schemes
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 15	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment

Total number of assessed students: 40

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ SDPR/04	**Course name:** Co-worker of project supported by national grant schemes
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 420

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/PFYZ/15	**Course name:** Comparative animal physiology

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 ECTS 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:

Notes:

Course assessment
Total number of assessed students: 20

A	B	C	D	E	FX	N	P
45.0	25.0	0.0	10.0	5.0	0.0	0.0	15.0

Provides: prof. RNDr. Beňadik Šmajda, CSc.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/DK/04	**Course name:** Conference in the country of residence
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 145	
abs	n
100.0	0.0
Provides:	
Date of last modification:	
Approved: prof. RNDr. Beňadik Šmajda, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ ODZP/14	**Course name:** Defence of Doctoral Thesis
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 30	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 47	

N	P
0.0	100.0

Provides:
Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ DZS/14	**Course name:** Dissertation examination
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 20	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities: ÚBEV/VEK3/11	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 58

N	P
0.0	100.0

Provides:
Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ DZP1a/04	**Course name:** Doctoral Thesis
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 10	
Recommended semester/trimester of the course: 6.	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 33	

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ DZP1b/04	**Course name:** Doctoral Thesis
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 30	
Recommended semester/trimester of the course: 8.	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 55	

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ EET1/03	**Course name:** Ecological ethology

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

Number of ECTS credits: 6

Recommended semester/trimester of the course:

Course level: II., III.

Prerequisities: ÚBEV/ETO1/03

Conditions for course completion:
Recognition.
Oral exmination.

Learning outcomes:
To analyze and comprehend to priciples of behavioral strategies in a given ecosystem from the point of view of sociobiology

Brief outline of the course:
The topic of sociobiology and its relations to other disciplines. The evolution of social behavior in animals and in man. Strategies of social interactions and formation of groups in relation to the ecosystem. The choice of appropriate social arrangement, sexual partner, reproductional and parental strategy. Competition among indiviuals and sexes.

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 192

A	B	C	D	E	FX	N	P
88.54	4.17	5.73	0.52	0.0	0.0	0.0	1.04

Provides: RNDr. Igor Majláth, PhD.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ 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 ECTS 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:

Notes:

Course assessment
Total number of assessed students: 237

A	B	C	D	E	FX	N	P
62.03	18.57	12.66	2.53	2.53	0.0	0.0	1.69

Provides: doc. RNDr. Marcel Uhrin, PhD.

Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/END/04	**Course name:** Endocrinology

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 ECTS 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:

Notes:

Course assessment
Total number of assessed students: 9

N	P
0.0	100.0

Provides: doc. RNDr. Monika Kassayová, CSc.

Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/ AJD1/07	**Course name:** English Language for PhD Students 1

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 ECTS credits: 2

Recommended semester/trimester of the course: 1.

Course level: III.

Prerequisities:

Conditions for course completion:
Written assignments - professional CV, short academic biography (200-350 words).
distance mode of instruction using MS teams

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 649

N	Ne	P	Pr	abs	neabs
0.0	0.0	51.31	0.0	48.69	0.0

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

Date of last modification: 11.02.2021

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: CJP/ AJD2/07	**Course name:** English Language for PhD Students 2

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 ECTS credits: 3

Recommended semester/trimester of the course: 2.

Course level: III.

Prerequisities:

Conditions for course completion:
Distance mode of instruction. Online consultations.
Test, oral exam in accordance with the exam requirements (https://www.upjs.sk/filozoficka-fakulta/cjp/doktorandi-upjs/)

Learning outcomes:
Development of students´language skills, improvement of students´linguistic competencies (selected aspects of English pronunciation, vocabulary and syntax), development of students´s pragmatic competence (selected aspects of functional grammar) with focus on English for academic and specific purposes. B2/C1 level of lanugage competence (according to CEFR.)

Brief outline of the course:
Specific aspecs of academic and professional English with focus on vocabulary development (noun and verb collocations, phrasal verbs, prepositional phrases, word-formation, formal/informal language, etc.), selected aspects of English grammar (prepositions, grammar tenses, passive voice, etc.), selected functional grammar (expressing opinion, cause/effect, arguments, examples, etc.). Academic communication. Cross-language interference.

Recommended literature:
Kolaříková, Z., Petruňová, H., Timková, R.: Angličtina v akademickom prostredí (cvičebnica). UPJŠ Košice, 2015
McCarthy, M., O´Dell, F.: Academic Vocabulary in Use. CUP, 2008
Štepánek, L., J. De Haff a kol.: Academic English-Akademická angličtina. Grada Publishing, a.s., 2011
Blašková, K.: Handbook of English for Postgraduate Students. Vyd. SPRINT Bratislava, 2007
Dušková, L. a kol.: Hovorová angličtina pre vedeckých a odborných pracovníkov. Veda. Bratislava, 1982
Armer, T.: Cambridge English for Scientists. CUP, 2011
Porter, D.: Check your vocabulary for Academic English. Macmillan Publishers Limited, 2008
Oxford Collocations Dictionary for students of English. OUP, 2002
lms.upjs.sk

Course language:

B2/C1 level according to CEFR

Notes:

Course assessment
Total number of assessed students: 607

N	Ne	P	Pr	abs	neabs
0.33	0.0	92.59	1.32	5.77	0.0

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

Date of last modification: 10.02.2021

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ EFYZ/04	**Course name:** Environmental physiology
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 15s **Course method:** present	
Number of ECTS credits: 4	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 7

N	P
0.0	100.0

Provides:
Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ETO/04	**Course name:** Etológia
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 15s **Course method:** present	
Number of ECTS credits: 4	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 17

N	P
0.0	100.0

Provides: RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD.
Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ EXON/04	**Course name:** Experimental oncology

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 ECTS 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:

Notes:

Course assessment
Total number of assessed students: 12

N	P
0.0	100.0

Provides: doc. RNDr. Bianka Bojková, PhD.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ IMU/04	**Course name:** Immunology
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 20s **Course method:** present	
Number of ECTS credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 35

N	P
0.0	100.0

Provides: RNDr. Vlasta Demečková, PhD.
Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ NEM/04	**Course name:** Implementation of new experimental methodology
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 15	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 77

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ MK/04	**Course name:** International Conference
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 6	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 220

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ DKZU/04	**Course name:** International conference taking place in the country of residence
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 4	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 118

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
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 and the method:
Course type:
Recommended course-load (hours):
Per week: Per study period:
Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 60

abs	n
100.0	0.0

Provides:

Date of last modification:

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ DNC/04	**Course name:** Journals not registered in the Current Contents Connect database and published in the country of residence
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 46	

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik 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 and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 20	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 259

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ DKC/04	**Course name:** Journals registered in the Current Contents Connect database and published in the country of residence
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 15	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 17

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ NEU/04	**Course name:** Neuronal basis of behavior.

Course type, scope and the method:
Course type: Lecture
Recommended course-load (hours):
Per week: Per study period: 15s
Course method: present

Number of ECTS 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:

Notes:

Course assessment
Total number of assessed students: 13

N	P
0.0	100.0

Provides: prof. RNDr. Beňadik Šmajda, CSc.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
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 and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 127

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/PAR1/03	**Course name:** Parasitology I.

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

Number of ECTS credits: 6

Recommended semester/trimester of the course:

Course level: I., II., III.

Prerequisities: ÚBEV/ZOM/04 and leboÚBEV/ZO1/03 and leboÚBEV/ZO1/04

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 439

A	B	C	D	E	FX	N	P
52.16	20.05	12.76	10.48	3.19	0.68	0.0	0.68

Provides: RNDr. Viktória Majláthová, PhD., RNDr. Igor Majláth, PhD.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ PAR2/03	**Course name:** Parasitology II

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 ECTS credits: 3

Recommended semester/trimester of the course:

Course level: II., III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 57

A	B	C	D	E	FX	N	P
78.95	10.53	7.02	1.75	0.0	1.75	0.0	0.0

Provides: RNDr. Viktória Majláthová, PhD.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ PgVU/17	**Course name:** Pedagogy for university teachers

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

Number of ECTS credits: 5

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 32

abs	n	neabs
100.0	0.0	0.0

Provides: PaedDr. Renáta Orosová, PhD.

Date of last modification: 12.02.2021

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ RZ/04	**Course name:** Peer-reviewed collections of papers and monographs published abroad or in in the country of residence
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 5	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 293

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/PsVU/17	**Course name:** Psychology for University Lecturers

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

Number of ECTS credits: 5

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:
Case study, micro-output, its analysis
Current modifications of the course for the semester 2020/2021 are listed in the electronic bulletin board of the course.

Learning outcomes:
Acquisition of psychological skills necessary for professional, competent performance of university teaching practice of doctoral students on the basis of acquisition and use of selected psychological knowledge from cognitive psychology, psychology of emotions and motivation, personality psychology, developmental, social, pedagogical psychology and health psychology. They will enable university teachers - doctoral students to understand the psychological interpretation of human development, upbringing and education. The acquired knowledge will enable better application in practice, are closely linked to practice and are based on current knowledge of the field.

Brief outline of the course:
University teacher and his work in the teaching process with a focus on:
teacher in relation to himself (cognitive, personality, social competencies and competencies in the use of methods), in relation to students and as part of the teacher-student relationship based on selected areas of cognitive psychology, psychology of emotions and motivation, developmental psychology, social psychology , educational psychology and health psychology with application to the university environment.

Recommended literature:
Alexitch, L. R. (2005). Applying social psychology to education. Social Psychology.–Ed.: Schneider F., Gruman J., Coutts L.–Sage Publications, Inc, 205-228.
Fry, H., Ketteridge, S., & Marshall, S. (2008). A handbook for teaching and learning in higher education: Enhancing academic practice. Routledge.
Mareš, J.: Pedagogická psychologie. Portál, 2013.
Kniha psychologie. Universum, 2014
Čáp, J., Mareš, J.: Psychologie pro učitele. Praha: Portál 2007.
Vágnerová, M.: Školní poradenská psychológie pro pedagogy. Praha: Karolínum 2005.

Course language:

Notes:

Course assessment
Total number of assessed students: 27

abs	n	neabs
100.0	0.0	0.0

Provides: Mgr. Marta Dobrowolska Kulanová, PhD., doc. PhDr. Beata Gajdošová, PhD., PhDr. Anna Janovská, PhD.

Date of last modification: 17.02.2021

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ RBI/04	**Course name:** Radiation biology
Course type, scope and the method: **Course type:** Practice **Recommended course-load (hours):** **Per week: Per study period:** 15s **Course method:** present	
Number of ECTS credits: 4	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 0

N	P
0.0	0.0

Provides: prof. RNDr. Beňadik Šmajda, CSc.
Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

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 and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course: 6., 8.	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 101	

abs	n
100.0	0.0

Provides:	
Date of last modification:	
Approved: prof. RNDr. Beňadik Šmajda, CSc.	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ IG/04	**Course name:** Receiving a grant under Internal Scientific Grant System (VVGS)
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 10	
Recommended semester/trimester of the course: 6., 8.	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 156	

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

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 and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 251

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ VKH1/03	**Course name:** Selected topics in herpetology

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 ECTS credits: 4

Recommended semester/trimester of the course:

Course level: II., III.

Prerequisities:

Conditions for course completion:
Writen test.
Oral examination.

Learning outcomes:
To broaden the knowledge of students on evolution, taxonomy, morphology, ecology and ecology of amphibia and reptiles aquired before in the subject Zoology.

Brief outline of the course:
Systematical overview of amphibia and reptilia with a classification on species level. Phylogenetical development of amphibia and reptilia. Charcteristics of morphological and ecophysiological adaptations. Adaptaions on the significant abiotic and biotic factors (food, tepmerature,substrate, humidity, etc.). Selected aspects of population dynamics of some groups. Behavioral manifestations of amphibia and reptilia from a comparative aspect.

Recommended literature:
1. BARUŠ V. a kol.: Reptiles-Reptilia (Fauna of the ČSFR),Prague, 1992 (in Czech)
2. BARUŠ V. a kol.: Amphibia (Fauna of the ČSFR). Prague,1992. (in Czech)
3. OLIVA O., HRABĚ S., LÁC J. : Vertebrates of Slovakia I. Bratislava, 1968 (in Slovak
4. ROČEK Z.: Studies in Herpetology. Praha, 1986.
5. ZWACH I. : Our species of amphibia and reptilia on the photograph. Prague,1990.
6. DIESENER G., REICHHOLF J.: Amphibia and reptilia. Bratislava,1997

Course language:

Notes:

Course assessment
Total number of assessed students: 133

A	B	C	D	E	FX	N	P
91.73	5.26	3.01	0.0	0.0	0.0	0.0	0.0

Provides: RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: Dek. PF UPJŠ/JSD/14	**Course name:** Spring School for PhD Students
Course type, scope and the method: **Course type:** Lecture **Recommended course-load (hours):** **Per week: Per study period:** 4d **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 154

abs	n
100.0	0.0

Provides: prof. RNDr. Katarína Cechlárová, DrSc.
Date of last modification: 03.05.2015
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ VYS/04	**Course name:** Talk given at scholar seminars of department or institute
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 2	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 244

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ PDS/18	**Course name:** Writing Dissertation Work
Course type, scope and the method: **Course type:** **Recommended course-load (hours):** **Per week: Per study period:** **Course method:** present	
Number of ECTS credits: 0	
Recommended semester/trimester of the course:	
Course level: III.	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 11	

N	P
0.0	100.0

Provides:
Date of last modification:
Approved: prof. RNDr. Beňadik Šmajda, CSc.