

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/AFV/15		<b>Course name:</b> Activating forms of biology teaching			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> II.					
<b>Prerequisites:</b> ÚBEV/DIB1/03					
<b>Conditions for course completion:</b> Colloquium - presentation of seminar work.					
<b>Learning outcomes:</b> Extension skills of new teaching methods and selected practical activities.					
<b>Brief outline of the course:</b> Teacher and student - partners in learning. The development of science skills through IBSE (Inquiry based science education). New approaches to formative and summative assessment in IBSE. New educational technologies supporting IBSE. Different ways of working with text when learning biology. Project management and cooperative methods for biology lessons. Presentation of seminar work.					
<b>Recommended literature:</b> Kimáková, K.: Úvod do štúdia didaktiky biológie, elektronický študijný text, 2008 Kimáková, K., Švecová, M.: Teorie a praxe zařazení školních projektů ve výuce přírodopisu a biologie, Karolinum Praha 2001 Hudáková, A., Kimáková, K.: Demonstračné pokusy a pozorovania z biológie rastlín, UPJŠ Košice 2005 Periodical publications for teaching biology. Internal materials and methodics on Moodle: <a href="https://lms.upjs.sk/login/index.php">https://lms.upjs.sk/login/index.php</a> . Existing curriculum standards and biology textbooks for elementary and secondary schools Existing curriculum standards and biology textbooks for elementary and secondary schools					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 10					
A	B	C	D	E	FX
50.0	20.0	30.0	0.0	0.0	0.0
<b>Provides:</b> PaedDr. Andrea Lešková, PhD., Mgr. Zuzana Boberová, PhD.					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ BDB/15		<b>Course name:</b> Biology and Didactics of Biology			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 1					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> II.					
<b>Prerequisites:</b> ÚBEV/MKVU/15 and ÚBEV/VEK1/03 and ÚBEV/DIB1/03					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 67					
A	B	C	D	E	FX
35.82	38.81	17.91	7.46	0.0	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/BDB/14		<b>Course name:</b> Biology and Didactics of Biology			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 1					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> II.					
<b>Prerequisites:</b> ÚBEV/DIB1/03 and (ÚBEV/FG1/03 or ÚBEV/ZOG1/03) and (ÚBEV/ZOM/04 or ÚBEV/ZO1/04 or ÚBEV/ZOO1/11 or ÚBEV/BO1/03 or ÚBEV/BOT1/03)					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 114					
A	B	C	D	E	FX
21.93	31.58	27.19	14.04	5.26	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/DGO/17		<b>Course name:</b> Geology and nature protection education			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> II.					
<b>Prerequisites:</b> ÚBEV/DIB1/03 and ÚGE/GEB/12					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0
<b>Provides:</b> PaedDr. Andrea Lešková, PhD., RNDr. Ivana Slepáková, PhD.					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD. Guaranteeprof. PhDr. Oľga Orosová, CSc. GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc. Guaranteedoc. RNDr. Katarína Kimáková, CSc. Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ DIB1/03	<b>Course name:</b> Didactics of biology
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 3 <b>Per study period:</b> 28 / 42 <b>Course method:</b> present	
<b>Number of credits:</b> 6	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> KPPaPZ/PPgU/15 or KPE/DPP/14 or KPE/PDU/15	
<b>Conditions for course completion:</b> Continuous assessment of tasks, which students prepared and submitted. Oral exam	
<b>Learning outcomes:</b> Meet specific subjects teaching biology in high school and an elementary school. Learn and apply didactic knowledges in the topics of the biology curriculum with respect of psychological principles of learning. Selected biology teaching methods and technologies.	
<b>Brief outline of the course:</b> <ul style="list-style-type: none"> <li>- The aims of biological education in Slovakia, basic documents.</li> <li>- Analysis of the curriculum and the formulation of educational objectives.</li> <li>- EUR framework, phases of learning.</li> <li>- Teaching strategies and methods in biology teaching.</li> <li>- Concept learning.</li> <li>- Problem solving and higher-order questions.</li> <li>- Inquiry based science education.</li> <li>- The importance of reflection.</li> <li>- Verification of biological knowledge and skills. Assessment and classification.</li> <li>- Educational aspects of biology teaching, development of critical thinking skills and key competences.</li> <li>- Teaching aids for biology, the role of ICT.</li> <li>- The school garden.</li> <li>- History of biology teaching. Various concepts of biology teaching abroad.</li> </ul>	
<b>Recommended literature:</b> Kimáková, K.: Úvod do štúdia didaktiky biológie, elektronický študijný text, 2008 Periodical publications for teaching biology. Internal study materials in Moodle <a href="https://lms.upjs.sk/login/index.php">https://lms.upjs.sk/login/index.php</a> Existing curriculum standards and biology textbooks for elementary and secondary schools Fišer, R.: Učíme deti myslet a učiť se. Praha: Portál, 2011. 176 s. ISBN 978-80262-0043-7 Gavora, P.: Akí sú moji žiaci. (Pedagogická diagnostika žiaka). Nitra: ENIGMA, 2011. 216 s. ISBN 978-80-89132-91-1	

Karnsová, M.: Jak budovat dobrý vztah mezi učitelem a žákem. Praha: Portál, 1995. 151 s. ISBN 80-7178-032-4 Kotrba, T., Lacina, L.: Praktické využití aktivizačních metod ve výuce. Brno: Společnost pro odbornou literaturu, 2007. 188 s. ISBN 978-80-87029-12-1 Kyriacou, Ch.: Klíčové dovednosti učitele. Praha: Portál, 1996. 153 s. ISBN 80-7178-022-7 Petty, G.: Moderní vyučování. Praha: Portál, 2013. 380 s. ISBN 80-7178-070-7 Silberman, M.: 101 Metod pre aktivní výcvik a vyučování. Praha: Portál, 1997. 312 s. ISBN: 80-7178-124-X					
<b>Course language:</b>					
<b>Course assessment</b>					
Total number of assessed students: 523					
A	B	C	D	E	FX
48.18	29.83	17.59	4.4	0.0	0.0
<b>Provides:</b> doc. RNDr. Katarína Kimáková, CSc., PaedDr. Andrea Lešková, PhD., RNDr. Ivana Slepáková, PhD.					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/DPOU/14		<b>Course name:</b> Diploma Thesis and its Defence			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 15					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> II.					
<b>Prerequisites:</b> ÚBEV/DPP3/14					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 79					
A	B	C	D	E	FX
46.84	35.44	12.66	2.53	1.27	1.27
<b>Provides:</b>					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ DPP1/14	<b>Course name:</b> Diploma Project I
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 79	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 23.02.2018	
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.	



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ DPP2/14	<b>Course name:</b> Diploma Project II
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚBEV/DPP1/14	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 78	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 23.02.2018	
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/DPP3/14	<b>Course name:</b> Diploma Project III
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚBEV/DPP2/14 or ÚBEV/DP2b/03	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 80	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 23.02.2018	
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ ETO1/03		<b>Course name:</b> Ethology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<b>Course level:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Recognition. Written examination.					
<b>Learning outcomes:</b> To teach the students to know and to be aware of the importance of the behavioural aspect in biological sciences					
<b>Brief outline of the course:</b> History and development of ethology. Ethological methods. The innate forms of behaviour. The simplest forms of learning – conditioning and instrumental learning. Higher form of learning. Social behaviour. Sexual behaviour. Play behaviour. Biological rhythms. Orientation in space and animal migrations. Communication systems of animals. Emotions. Aggression in animal and human behaviour. Abnormal forms of behaviour					
<b>Recommended literature:</b> Franck, D.: Verhaltensbiologie. Einführung in die Ethologie. Georg Thieme-Verlag, 1993 Manning, A., Dawkins, M. S.: An introduction to animal behaviour. Cambridge University Press, 1992					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 930					
A	B	C	D	E	FX
39.68	24.73	25.7	7.96	1.83	0.11
<b>Provides:</b> RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD., RNDr. Terézia Kisková, PhD.					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ FG1/03		<b>Course name:</b> Phytogeography			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present					
<b>Number of credits:</b> 5					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Written work. Exam.					
<b>Learning outcomes:</b> To obtain theoretical and practical knowledge from phytogeography.					
<b>Brief outline of the course:</b> History of phytogeography. Plants and environment. Chorology, area, area disjunctions, relics, endemites, vicariancy, floral elements. Main course of florogenesis since paleozoic to quaternary ages. Postglacial evolution of Slovak vegetation. Regional phytogeography of Earth. Vegetation geography: from tropical rainforests to tundras. Changes of earth vegetation and their study. Geographical origin of cultivated plants. Practices: Fieldworks. Preparing of maps. Phytogeographical division of Slovakia. Students seminar works on phytogeography.					
<b>Recommended literature:</b> Hendrych R.: Fytografie. - SPN, Praha 1984. Brown J. H., Lomolino M. V.: Biogeography. - Sinauer Associates, Sunderland, 1998.					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 349					
A	B	C	D	E	FX
38.97	22.35	21.49	8.02	8.31	0.86
<b>Provides:</b> prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčík, PhD.					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚGE/ GEB/12		<b>Course name:</b> Geology and petrography			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 2 <b>Per study period:</b> 42 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 2.					
<b>Course level:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 847					
A	B	C	D	E	FX
11.1	21.02	32.35	22.43	9.68	3.42
<b>Provides:</b> Ing. Katarína Bónová, PhD.					
<b>Date of last modification:</b> 22.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/IMU1/03		<b>Course name:</b> Immunology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Recognition. Oral examination.					
<b>Learning outcomes:</b> This course introduces the students to the basic concepts of immunology as well as highlights the role and importance of immunology in various human diseases. The aim of Immunology lessons is the presentation of the organization and function of the immune system, as well as the comprehension of complex molecular and cellular interactions during the induction of immune responses.					
<b>Brief outline of the course:</b> Basic immunology: Lymphatic System Anatomy, The Innate Immune System, The Induced Responses of Innate Immunity, The Adaptive Immune Response, Antigens and Antibodies, Antigen Recognition by B-cell and T-cell Receptors, Antigen Presentation to T-lymphocytes, Complement, Clinical immunology: Allergy and other Hypersensitivities, Autoimmunity and Transplantation, Tumor Immunology, Disorders of The Immune System.					
<b>Recommended literature:</b> Janeway Ch. A., Travers P., Walport M., Schlomchik M.: Immunobiology. Garland Science, 2004 Murphy, K. (2012): Janeway's Immunobiology. 8th ed. Garland Science Delves, P.J. et al. (2011): Roitt's essential immunology 12th ed Wiley-Blackwell					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 866					
A	B	C	D	E	FX
38.68	24.13	25.17	6.93	1.73	3.35
<b>Provides:</b> RNDr. Vlasta Demečková, PhD.					
<b>Date of last modification:</b> 23.02.2018					

**Approved:** Guaranteeprof. PhDr. Eugen Andreanský, PhD. Guaranteeprof. PhDr. Oľga Orosová, CSc. GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc. Guaranteedoc. RNDr. Katarína Kimáková, CSc. Guaranteedoc. Mgr. Róbert Stojka, PhD.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ MKVU/15		<b>Course name:</b> Microbiology and basics of virology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 5					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Attendance of practicals (at least 90%), 2 written examinations during semester, final oral examination					
<b>Learning outcomes:</b> Students will obtain a basic informations on viruses, prokaryotic and eukaryotic microorganisms, their cytology, physiology, genetics, ecology, classification, and importance . Information on basic methods for studying microorganisms will be provided.					
<b>Brief outline of the course:</b> Viruses, prokaryotic and eukaryotic microorganisms, their cytology, physiology, genetics, ecology, classification. The importance of microorganisms for humans and environment.					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 1224					
A	B	C	D	E	FX
22.88	11.85	17.32	20.18	23.12	4.66
<b>Provides:</b> doc. RNDr. Peter Pristaš, CSc., RNDr. Mariana Kolesárová, PhD., RNDr. Lenka Maliničová, PhD.					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/MPPb/15	<b>Course name:</b> Scheduled practice teaching
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 36s <b>Course method:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> KPE/MPPa/15 and KPE/PDU/15 and (KPPaPZ/PaSPP/09 or KPPaPZ/PPgU/15)	
<b>Conditions for course completion:</b> During the practice student observe 11 biology lessons and leads one own biology hour under the guidance of a teacher trainer. Confirmation of classroom visits. Written assessment from the teacher trainer.	
<b>Learning outcomes:</b> Students acquire knowledge by observing the practical application of teaching skills for teaching the subject of biology and getting to know the organization of school work. Introduction into practical implementation of biology lesson.	
<b>Brief outline of the course:</b> Students observe the process of teaching biology at primary and secondary school and analyzed it with teacher trainer. Practice takes place continuously during the course of the semester. Practice is scheduled once a week at the time of first to third lesson in schools. The first two hours observation/teaching, the third hour analysing process under the guidance of a teacher trainer.	
<b>Recommended literature:</b> Current biology textbooks for primary and secondary schools in Slovakia.	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 408	
abs	n
99.51	0.49
<b>Provides:</b>	
<b>Date of last modification:</b> 23.02.2018	
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/MPPc/15	<b>Course name:</b> Continuous practice teaching I
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 4t <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚBEV/MPPb/03 or ÚBEV/MPPb/15	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 140	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 23.02.2018	
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/MPPd/15	<b>Course name:</b> Continuous practice teaching II
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 6t <b>Course method:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚBEV/MPPc/15	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Course assessment</b> Total number of assessed students: 115	
abs	n
100.0	0.0
<b>Provides:</b> PaedDr. Andrea Lešková, PhD.	
<b>Date of last modification:</b> 23.02.2018	
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ OPR/12		<b>Course name:</b> Conservation Biology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 0 <b>Per study period:</b> 28 / 0 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Examination.					
<b>Learning outcomes:</b> The main goal of the subject is to introduce term biodiversity, principal threats and conservation of species, populations, communities and ecosystems.					
<b>Brief outline of the course:</b> Fundamental and origin of conservation biology. Different levels of biodiversity, biodiversity hotspots on Earth. Economic value of biodiversity as the principal argument of nature conservation. Factors leading to biodiversity threats. Extinctions and problems of small populations. Conservation of populations and species, conservation programs and strategies. Classification and management of protected areas, conservation outside the protected areas. Sustainable development, education to conservation of nature.					
<b>Recommended literature:</b> Primack R.B., 2010: Essentials of conservation biology. Sinauer Associates, 1-603					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 601					
A	B	C	D	E	FX
75.04	14.14	7.82	2.0	0.33	0.67
<b>Provides:</b> prof. RNDr. Ľubomír Kováč, CSc.					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ SPP/08		<b>Course name:</b> School experiments and observations			
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week: 2 Per study period: 28</b> <b>Course method:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Realisation of didactic analysis after conducted experiments and observations.					
<b>Learning outcomes:</b> Preparing students for the implementation of biological school experiments and observations.					
<b>Brief outline of the course:</b> The course is aimed at training and application skills that are necessary for the implementation of experiments and observations in the classroom. It helps students develop theoretical knowledge in practical work during training and familiarizes them with didactic methods in demonstrating the biological observation and educational experiments. It focuses on the possibilities of applying these methods in the various stages of a teaching unit.					
<b>Recommended literature:</b> HUDÁKOVÁ, A., KIMÁKOVÁ, K. 2005. Demonštračné pokusy a pozorovania z biológie rastlín. Košice: UPJŠ; Prírodovedecká fakulta, 84 s. ISBN 80-7097-610-1. Internal study materials in Moodle <a href="https://lms.upjs.sk/login/index.php">https://lms.upjs.sk/login/index.php</a>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 64					
A	B	C	D	E	FX
64.06	20.31	12.5	3.13	0.0	0.0
<b>Provides:</b> PaedDr. Andrea Lešková, PhD., RNDr. Ivana Slepáková, PhD.					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD. Guaranteeprof. PhDr. Oľga Orosová, CSc. GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc. Guaranteedoc. RNDr. Katarína Kimáková, CSc. Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ SVK/01		<b>Course name:</b> Student Scientific Conference			
<b>Course type, scope and the method:</b> <b>Course type:</b> <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> <b>Course method:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 2.					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 258					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/VEK1/03		<b>Course name:</b> Introduction to Ecology			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b> Fundamental parameters and relations in ecological science.					
<b>Brief outline of the course:</b> Ecological factors and relations in environment (air, water, soil); influence of ecological factors on individuals (morphological adaptations, behavioral reactions); populations and communities; ecosystems (impact assessment); conservation and biodiversity.					
<b>Recommended literature:</b> Begon, M., Harper, J. L., Townsend, C. L.: Ecology: individuals, populations, and communities. Blackwell Sci. Publ., 1990					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 1522					
A	B	C	D	E	FX
19.58	15.37	24.9	18.46	12.75	8.94
<b>Provides:</b> RNDr. Natália Raschmanová, PhD.					
<b>Date of last modification:</b> 23.02.2018					
<b>Approved:</b> Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ ZOG1/03		<b>Course name:</b> Zoogeography			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Active participation in seminars. Preparation of oral presentation to selected topic. Semestral written test. Oral examination.					
<b>Learning outcomes:</b> The main goal of the subject is to get knowledge on the basic reasons of recent distribution of the animals on the Earth, zoogeographic regionalization of the Earth's surface and human influence on the faunal distribution in the history.					
<b>Brief outline of the course:</b> This course will review our current understanding of the patterns of animal distribution and the processes that influence distributions of species and their attributes. Zoogeography will integrate information on the historical and current ecology, genetics, and physiology of animals and their interaction with environmental processes (continental drift, climate) in regulating geographic distributions. The course will emphasize descriptive and analytical approaches useful in hypothesis testing in zoogeography and will illustrate applied aspects of zoogeography (e.g. refuge design in conservation).					
<b>Recommended literature:</b> Buchar, J., 1983: Zoogeografie. SPN Praha Darlington, P.J., 1998: Zoogeography: The geographical distribution of animals. Krieger, USA Lomolino M.V., Brown J.H., Riddle B. R., 2005: Biogeography. Sinauer Associates, 1-845 Plesník, P., Zatkalík, F., 1996: Biogeografia. Vysokoškolské skriptá, PríFUK Bratislava					
<b>Course language:</b>					
<b>Course assessment</b> Total number of assessed students: 877					
A	B	C	D	E	FX
23.26	23.6	25.31	17.9	7.98	1.94
<b>Provides:</b> prof. RNDr. Ľubomír Kováč, CSc.					



**Date of last modification:** 23.02.2018

**Approved:** Guaranteeprof. PhDr. Eugen Andreanský, PhD.Guaranteeprof. PhDr. Oľga Orosová, CSc.GuaranteeProf. h.c. prof. PhDr. Vladimír Leško, CSc.Guaranteedoc. RNDr. Katarína Kimáková, CSc.Guaranteedoc. Mgr. Róbert Stojka, PhD.