

# CONTENT

1. Academic English.....	3
2. Activating forms of biology teaching.....	5
3. Administration of OS.....	7
4. Biology and Didactics of Biology.....	9
5. Bullying, Violence and Their Prevention.....	11
6. Child and Adolescent Sociology.....	13
7. Class Management.....	14
8. Classical and quantum computations.....	15
9. Communicative Competence in English.....	17
10. Communicative Grammar in English.....	19
11. Communicative Grammar in German Language.....	21
12. Computational and cognitive neuroscience II.....	23
13. Computational complexity.....	25
14. Computer science and didactics of informatics.....	27
15. Conservation Biology.....	28
16. Continuous practice teaching I.....	29
17. Continuous practice teaching I.....	30
18. Continuous practice teaching II.....	32
19. Continuous practice teaching II.....	33
20. Creating Text Teaching Aids.....	35
21. Culture of Spoken Discourse.....	36
22. Defence of diploma thesis.....	37
23. Development and processing of multimedia.....	39
24. Development and processing of multimedia.....	41
25. Developmental Psychology for Teachers.....	43
26. Didactics of biology.....	45
27. Didactics of informatics.....	48
28. Didactics of informatics.....	50
29. Didactics of programming.....	53
30. Diploma Project I.....	56
31. Diploma Project I.....	57
32. Diploma Project II.....	58
33. Diploma Project II.....	59
34. Diploma Project III.....	60
35. Diploma Project III.....	61
36. Diploma Thesis and its Defence.....	62
37. Drug Addiction Prevention in Educational Practice.....	63
38. Educational Counselling.....	65
39. Essentials of Special Education.....	66
40. Ethology.....	67
41. Experiential Education.....	68
42. Formal languages and automata.....	69
43. Geology and nature protection education.....	71
44. Geology and petrography.....	73
45. Health Psychology.....	74
46. History of Biology Seminar.....	76
47. Immunology.....	77
48. Information theory, encoding.....	79

49. Introduction into Psychology of Religion.....	81
50. Introduction to Ecology.....	83
51. Introduction to Research Methodology in Education and Psychology.....	85
52. Introduction to computer graphics.....	87
53. Introduction to neural networks.....	88
54. Logic programming.....	90
55. Microbiology and basics of virology.....	92
56. Microcomputer Based Science Laboratory.....	93
57. Modern Didactical Technology.....	95
58. Pedagogical Communication.....	97
59. Pedagogical Diagnostics.....	98
60. Pedagogy and Psychology.....	99
61. Phytogeography.....	102
62. Pro-seminar to diploma thesis in informatics.....	104
63. Problem and Aggressive Behaviour of Pupils. Etiology, Prevention and Intervention.....	107
64. Professional Ethics for Teachers and School Counsellors.....	109
65. Programming language C.....	111
66. Psychology and Educational Psychology.....	113
67. Psychology of Creativity and Working with Gifted Students in Teacher Practice.....	115
68. Reading Literacy in Educational Process.....	117
69. Running practice.....	118
70. Scheduled practice teaching.....	120
71. Scheduled practice teaching.....	122
72. School experiments and observations.....	124
73. Seaside Aerobic Exercise.....	126
74. Seminar to diploma theses in informatics XI.....	128
75. Seminar to diploma theses in informatics XI.....	130
76. Slovak Language for Teachers.....	132
77. Sports Activities I.....	134
78. Sports Activities II.....	136
79. Sports Activities III.....	138
80. Sports Activities IV.....	140
81. Student scientific conference.....	142
82. Summer Course-Rafting of TISA River.....	144
83. Supervised Teaching Practice.....	146
84. Teaching Methodology and Pedagogy.....	147
85. The Art of Aiding by Verbal Exchange.....	148
86. Zoogeography.....	150

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> CJP/ PFAJAKA/07	<b>Course name:</b> Academic English
<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> combined, present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Active classroom participation, assignments handed in on time, 2 absences tolerated 1 test (10th week), no retake. Presentation on chosen topic Final evaluation- average assessment of test (40%), essay (30%) and presentation (30%). Grading scale: A 93-100%, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64% and less	
<b>Learning outcomes:</b> The development of students' language skills - reading, writing, listening, speaking, improvement of their linguistic competence - students acquire knowledge of selected phonological, lexical and syntactic aspects, development of pragmatic competence - students can effectively use the language for a given purpose, with focus on Academic English, level B2.	
<b>Brief outline of the course:</b> Formal and informal English Academic English and its specific features Key academic verbs and nouns Linking words in academic writing, writing a paragraph, word-order, topic sentences Word-formation - affixation abstract Selected aspects of English pronunciation, academic vocabulary Selected functional grammar structures - defining, classifying, expressing opinion, cause-effect, paraphrasing	
<b>Recommended literature:</b> Seal B.: Academic Encounters, CUP, 2002 T. Armer :Cambridge English for Scientists, CUP 2011 M. McCarthy M., O'Dell F. - Academic Vocabulary in Use, CUP 2008 Zemach, D.E, Rumisek, L.A: Academic Writing, Macmillan 2005 Olsen, A. : Active Vocabulary, Pearson, 2013 www.bbclearningenglish.com Cambridge Academic Content Dictionary, CUP, 2009	

<b>Course language:</b> English language, level B2 according to CEFR.					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 400					
A	B	C	D	E	FX
34.75	22.0	15.75	9.5	6.25	11.75
<b>Provides:</b> Mgr. Viktória Mária Slovenská					
<b>Date of last modification:</b> 19.09.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## 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 ECTS 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 of pedagogical skills with new teaching methods resulting from educational and scientific projects solved at the Department of Biology Didactics. Involvement in projects and practical training of innovative 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 Kireš, M. [et al.] .Bádateľské aktivity v prírodovednom vzdelávaní [Inquiry activities in science education] časť A . - 1. vyd. - Bratislava : Štátny pedagogický ústav, 2016. - 128 s. - Projekt: Establish 244749 ; Sails 2890085. - ISBN 9788081181559 Standards and biology textbooks for Slovak lower and upper secondary schools (ISCED 2, ISCED 3) Study materials of the internal course published in Moodle <a href="https://lms.upjs.sk/login/index.php">https://lms.upjs.sk/login/index.php</a>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 12					
A	B	C	D	E	FX
58.33	16.67	25.0	0.0	0.0	0.0
<b>Provides:</b> PaedDr. Andrea Lešková, PhD., Mgr. Zuzana Boberová, PhD.					

<b>Date of last modification:</b> 16.12.2021
<b>Approved:</b> prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/AOS1/15	<b>Course name:</b> Administration of OS
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1., 3.	
<b>Course level:</b> I., II., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> The condition for passing the course is successful realization of a project focused on the network services configuration.	
<b>Learning outcomes:</b> The result of the education is an understanding of the theoretical and practical background of Windows and Linux operating systems and selected network services.	
<b>Brief outline of the course:</b> 1. Management of Linux operating system (basic system tools for troubleshooting, system startup, network configuration), 2. File systems (general view), 3. File systems (RAID, LVM), 4. Web hosting services I. (basic concept, APACHE), 5. Web hosting services II. (SQL, HTTPS, security, NGINX), 6. File services I. (SAMBA, NFS), 7. File services II. (FTP), 8. Management of local computer network I. (routing, DHCP), 9. Management of local computer network II. (firewall), 10. VPN, 11. SSH and Proxy, 12. Kernel of the Linux operating system, 13. Administration of the Windows operating system.	
<b>Recommended literature:</b> 1. LPIC-1 Exam 102. LPI [online]. Canada: The Linux Professional Institute, 2021 [cit. 2021-9-22]. Dostupné z: <a href="https://learning.lpi.org/en/learning-materials/102-500/">https://learning.lpi.org/en/learning-materials/102-500/</a> , 2. Linux - Dokumentační projekt [online]. 4. Praha: Computer Press, 2007 [cit. 2021-9-22]. Dostupné z: <a href="https://i.info.cz/files/root/k/LDP_4.pdf">https://i.info.cz/files/root/k/LDP_4.pdf</a> , 3. The LPIC2 Exam Prep [online]. Sue B.V. - Open Sourced, 2021 [cit. 2021-9-26]. Dostupné z: <a href="https://lpic2book.github.io/src/">https://lpic2book.github.io/src/</a>	
<b>Course language:</b> Slovak or English	
<b>Notes:</b> Content prerequisites: understanding of fundamental concepts of operating systems, computer networks, basic skill in Linux shell (e.g. bash) and Powershell.	

<b>Course assessment</b>					
Total number of assessed students: 35					
A	B	C	D	E	FX
60.0	20.0	11.43	0.0	8.57	0.0
<b>Provides:</b> doc. RNDr. JUDr. Pavol Sokol, PhD., RNDr. Tomáš Bajtoš					
<b>Date of last modification:</b> 26.09.2021					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					



## 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 ECTS credits:</b> 1	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> II.	
<b>Prerequisites:</b> (ÚBEV/MKVU/15 or ÚBEV/VMK/22) and ÚBEV/VEK1/03 and ÚBEV/DIB1/03	
<b>Conditions for course completion:</b> 112 credits of the study program subjects in the prescribed composition.	
<b>Learning outcomes:</b> State exams in the subject of Biology and didactics of biology are held in the form of an oral exam. The student has to demonstrate professional knowledge of the drawn topic and demonstrate the ability to present them, discuss them in a broader context. Each topic is assigned a didactic problem, which is to explain and apply to the teaching of the content at the level of secondary (secondary) or primary (primary) school according to the assignment in the question.	
<b>Brief outline of the course:</b> The graduate will demonstrate knowledge of biological content in context. Applies didactic knowledge to the given biological content. Biological content: Virus architecture. Structure, nutrition, growth, reproduction and genetics of microorganisms. Pathogenicity and virulence. Organizational levels of eukaryotes. Organisms and their environment. Ecological factors. Properties and relationships of populations and communities. Structure and function of ecosystems. Energy flow in ecosystems. Didactic content: State educational program ISCED2, ISCED3 - Biology. Principles of expressing the cognitive goals of the teaching unit. Conceptual process and logical procedures in teaching biology. Developing students' skills and competencies. Teaching biology based on elements of research, degrees of research. Student biological project. Formative and summative assessment in the process of teaching biology.	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	

<b>Course assessment</b>					
Total number of assessed students: 154					
A	B	C	D	E	FX
35.06	33.77	23.38	7.14	0.65	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 17.02.2022					
<b>Approved:</b> prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/SNP/09	<b>Course name:</b> Bullying, Violence and Their Prevention
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1., 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Active participation in seminars. Detailed information will be given. Active participation - 20% Seminar work - 40% Seminar work 2 - 40%	
<b>Learning outcomes:</b> The student will acquire the latest information about bullying in schools and its consequences, about solving problematic situations associated with bullying as well as about possible ways of prevention. Within the seminars, students will develop professional skills through the implementation of prevention activities. At the same time, their sensitivity to the issue of bullying and their willingness to actively address it during their pedagogical practice will increase.	
<b>Brief outline of the course:</b> Aggressive behavior. Characteristics of actors of bullying (personality, characteristics of family environment). Manifestations and possible causes of bullying. Bullying as a group process. The role of teacher, school and parent in solving bullying. Possibilities of prevention of bullying at the level of school, class, individuals. Primary, secondary and tertiary prevention. Socio-psychological activities used in the prevention of bullying.	
<b>Recommended literature:</b> Kolář, M.: Bolest šikanování. Cesta k zastavení epidemie šikanování ve školách. Portál, Praha, 2001 Jánošová a kol. Psychologie školní šikany. Grada, Praha, 2016 Říčan, P.: Agresivita a šikana mezi dětmi. Portál, Praha, 1995	
<b>Course language:</b>	
<b>Notes:</b>	

<b>Course assessment</b>					
Total number of assessed students: 190					
A	B	C	D	E	FX
83.68	14.74	1.05	0.53	0.0	0.0
<b>Provides:</b> doc. Mgr. Mária Bačíková, PhD.					
<b>Date of last modification:</b> 24.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPO/SDaM/15		<b>Course name:</b> Child and Adolescent Sociology			
<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 ECTS 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>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 913					
A	B	C	D	E	FX
50.6	29.35	15.01	3.5	1.2	0.33
<b>Provides:</b> doc. Mgr. Alexander Onufrák, PhD.					
<b>Date of last modification:</b> 29.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/MT/09		<b>Course name:</b> Class Management			
<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 ECTS credits:</b> 2					
<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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 568					
A	B	C	D	E	FX
53.87	34.68	8.45	1.58	0.53	0.88
<b>Provides:</b> doc. PaedDr. Renáta Orosová, PhD.					
<b>Date of last modification:</b> 20.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ KKV1/21	<b>Course name:</b> Classical and quantum computations
<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 ECTS credits:</b> 6	
<b>Recommended semester/trimester of the course:</b> 1., 3.	
<b>Course level:</b> II., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Successful completion of the subject is conditioned by proper acquisition of basic concepts, algorithms and models and demonstrating the ability to apply them creatively. The acquisition of knowledge takes place: <ul style="list-style-type: none"> <li>- continuously during the semester in the form of partial assignments,</li> <li>- a written test during the semester,</li> <li>- a written test at the exam,</li> <li>- oral exam.</li> </ul> In order to receive an evaluation, it is necessary to obtain at least 50% of points from each of the three parts (assignments during the semester, written part of the exam, oral part of the exam). The detailed evaluation method is published in the AIS.	
<b>Learning outcomes:</b> By completing the subject, the student will get: <ul style="list-style-type: none"> <li>- knowledge of the classification and design of probabilistic algorithms,</li> <li>- basic knowledge of the principles of quantum computers and their differences compared to classical computing models,</li> <li>- knowledge and skills about the design and functioning of quantum computing and become familiar with the most well-known algorithms,</li> </ul> = basic quantum computer programming skills.	
<b>Brief outline of the course:</b> <ol style="list-style-type: none"> <li>1. Introduction to quantum quantum computers. Basics of classical complexity theory.</li> <li>2. Boolean circuits and their basic properties.</li> <li>3. Probability algorithms.</li> <li>4. BPP class and probability testing.</li> <li>5. Basic properties of circuits and Fermat's test.</li> <li>6. Miller - Rabin's test and the position of the BPP class in the hierarchy of complexity models.</li> <li>7. Introduction to quantum computing and mathematical foundations of quantum theory.</li> <li>8. Spectral representation of self-adjoint operators.</li> <li>9. Quantum states and Hilbert vector spaces.</li> <li>10. Basic quantum operators and basic quantum algorithms.</li> </ol>	

11. Quantum teleportation, superdense coding and Grover's algorithm. 12. Fourier transformation. 13. Shor's algorithm.					
<b>Recommended literature:</b> 1. BERMAN, G.P., DOOLEN, G.D., MAINIERI, R., TSIFRINOVIC, V.I. Introduction to Quantum Computers. World Scientific, 2003. 2. GRUSKA, J. Quantum Computing. McGraw-Hill, 1999. 3. JOHNSON, G. A Shortcut Through Time: The Path to the Quantum Computer, Knopf 2003. 4. KITAEV, A.Y., SHEN, A.H., VYALYI, M.N. Classical and Quantum Computation. American Mathematical Society, 2002. 5. NIELSEN, M.A., CHUANG, I.L. Quantum Computation and Quantum Information. Cambridge University Press, 2000. 6. HIRVENSAALO, M., Quantum Computing, Springer 2004					
<b>Course language:</b> Slovak or english					
<b>Notes:</b> Content prerequisites: Linear algebra, Group theory, Probability theory, Theory of algorithms, Introduction to quantum computers.					
<b>Course assessment</b> Total number of assessed students: 83					
A	B	C	D	E	FX
26.51	40.96	15.66	4.82	2.41	9.64
<b>Provides:</b> prof. RNDr. Gabriel Semanišin, PhD., RNDr. Marek Semjan					
<b>Date of last modification:</b> 25.07.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> CJP/ PFAJKKA/07		<b>Course name:</b> Communicative Competence in English			
<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> combined, present					
<b>Number of ECTS credits:</b> 2					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I., II., N					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Active participation in class and completed homework assignments. Students are allowed to miss two classes at the most. 2 credit tests (presumably in weeks 6/7 and 12/13) and an oral presentation in English. Final evaluation consists of the scores obtained for the 2 tests (50%) and the presentation (50%). Final grade will be calculated as follows: A 93-100 %, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64 % and less.					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b> <a href="http://www.bbclearningenglish.com">www.bbclearningenglish.com</a> Štěpánek, Libor a kol. Academic English-Akademická angličtina. Praha: Grada Publishing, a.s., 2011. McCarthy M., O'Dell F.: English Vocabulary in Use, Upper-Intermediate. CUP, 1994. Fictumova J., Ceccarelli J., Long T.: Angličtina, konverzace pro pokročilé. Barrister and Principal, 2008. Peters S., Gráf T.: Time to practise. Polyglot, 2007. Jones L.: Communicative Grammar Practice. CUP, 1985.					
<b>Course language:</b> English language, B2 level according to CEFR					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 289					
A	B	C	D	E	FX
44.64	20.76	17.65	7.96	6.23	2.77
<b>Provides:</b> Mgr. Barbara Mitříková, Mgr. Viktória Mária Slovenská					
<b>Date of last modification:</b> 12.02.2023					

**Approved:** prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajči, PhD., prof. RNDr. Lubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> CJP/ PFAJGA/07	<b>Course name:</b> Communicative Grammar in English
<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> combined, present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Active classroom participation (maximum 2 absences tolerated), homework assignments completed by given deadlines. Powerpoint presentation of a topic related to the study field. Final Test - end of semester, no retake Final assessment = average of test and presentation. Grading scale: A 93-100%, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64% and less	
<b>Learning outcomes:</b> The development of students' language skills - reading, writing, listening, speaking, improvement of their communicative linguistic competence. Students acquire knowledge of selected phonological, lexical and syntactic aspects, development of pragmatic competence. Students can effectively use the language for a given purpose, with focus on Academic English and English on level B2.	
<b>Brief outline of the course:</b> Selected aspects of English grammar and pronunciation Word formation Contrast of tenses in English The passive voice Types of Conditionals Phrasal verbs and English idioms Words order and collocations, prepositional phrases	
<b>Recommended literature:</b> Vince M.: Macmillan Grammar in Context, Macmillan, 2008 McCarthy, O'Dell: English Vocabulary in Use, CUP, 1994 <a href="http://www.linguahouse.com">www.linguahouse.com</a> <a href="http://esllibrary.com">esllibrary.com</a> <a href="http://bbclearningenglish.com">bbclearningenglish.com</a> <a href="http://ted.com/talks">ted.com/talks</a>	
<b>Course language:</b>	

English language, level B2 according to CEFR.					
<b>Notes:</b>					
<b>Course assessment</b>					
Total number of assessed students: 432					
A	B	C	D	E	FX
39.81	19.91	16.2	8.1	5.79	10.19
<b>Provides:</b> Mgr. Lenka Klimčáková					
<b>Date of last modification:</b> 13.09.2022					
<b>Approved:</b> prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KGER/ NJKG/07	<b>Course name:</b> Communicative Grammar in German Language
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Active participation in class and completed homework assignments. Students are allowed to miss 2 classes at the most (2x90 min.). 2 control tests during the semester. Final grade will be calculated as follows: A 93-100 %, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64 % and less.	
<b>Learning outcomes:</b> The aim of the course is to identify and eliminate the most frequent grammatical errors in oral and written communication, learning language skills of listening comprehension, speaking, reading and writing, increasing students' language competence (acquisition of selected phonological, lexical and syntactic knowledge), development of students' pragmatic competence (acquisition of the ability to express selected language functions), development of presentation skills, etc.	
<b>Brief outline of the course:</b> The course is aimed at practicing and consolidating knowledge of morphology and syntax of German in order to show the context in grammar as a whole. The course is intended for students who often make grammatical errors in oral as well as written communication. Through the analysis of texts, audio recordings, tests, grammar exercises, monologic and dialogical expressions of students focused on specific grammatical structures, problematic cases are solved individually and in groups. Emphasis is placed on the balanced development of grammatical thinking in the communication process, which ultimately contributes to the development of all four language skills.	
<b>Recommended literature:</b> Dreyer, H. – Schmitt, R.: Lehr- und Übungsbuch der deutschen Grammatik. Hueber Verlag GmbH & Co. Ismaning, 2009. Krüger, M.: Motive Kursbuch, Lektion 1 – 30. Huebert Verlag GmbH & Co. Ismaning, 2020. Brill, L.M. – Techmer, M.: Deutsch. Großes Übungsbuch. Wortschatz. Huebert Verlag GmbH & Co. Ismaning, 2011. Földeak, Hans: Sag's besser!. Grammatik. Arbeitsbuch für Fortgeschrittene. Huebert Verlag GmbH & Co. Ismaning, 2001. Geiger, S. – Dinsel, S.: Deutsch Übungsbuch Grammatik A2-B2. Huebert Verlag GmbH & Co. Ismaning, 2018. Dittelová, E. – Zavatčanová, M.: Einführung in das Studium der deutschen Fachsprache. Košice: ES UPJŠ, 2000.	

<b>Course language:</b> German, Slovak language					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 56					
A	B	C	D	E	FX
60.71	10.71	8.93	3.57	8.93	7.14
<b>Provides:</b> Mgr. Ulrika Strömplová, PhD.					
<b>Date of last modification:</b> 12.07.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ VKN/15	<b>Course name:</b> Computational and cognitive neuroscience II
<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 ECTS credits:</b> 5	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> II., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Midterm exam Final exam consisting of written and/or oral part	
<b>Learning outcomes:</b> Advanced topics in computational and cognitive neuroscience, and in the tools used in neuroscience.	
<b>Brief outline of the course:</b> 1. Intro: Cognitive psychology, neural modeling. Theme 1: Topics in cognitive and neural science 2. Neural basis of vision 3. Visual object recognition and visual scene analysis 4. Auditory cognition. Echo suppression. Auditory scene analysis 5. Cortical sound processing. 6. Other topics in the study of brain and main: thinking, consciousness, emotions, motivation Topic 2: Modeling in cognitive and neural science 7. Intro 8. Connectionism, STM and LTM modeling 9. Additive and shunting neural networks. 10. Learning rule Outstar. 11. Adaptive resonance theory. 12. Statistical and decision-theory modeling Topic 3: Current research at UPJS 13. Invited lecture	
<b>Recommended literature:</b> 1. KANDEL, E. R., SCHWARTZ, J. H. and JESSELL, T.M.: Principles of Neural Science. McGraw-Hill, 2021 ISBN-13: 978-1259642234 2. Dayan P and LF Abbott: Theoretical Neuroscience - Computational and Mathematical Modeling of Neural Systems. MIT Press, 2005 ISBN-13: 978-0262541855 3. Thagard P: Mind: Introduction to Cognitive Science, 2nd Edition. Bradford Books. ISBN-13 : 978-0262701099	

4. HERTZ, J., KROGH, A. and PALMER R. G.: Introduction to the theory of neural computation. Addison-Wesley 1991 ISBN-13: 978-0201515602					
<b>Course language:</b> Slovak or English					
<b>Notes:</b> Content prerequisites: basics of neurobiology, cognitive psychology, linear algebra and differential equations, programming, or instructor's consent					
<b>Course assessment</b> Total number of assessed students: 9					
A	B	C	D	E	FX
44.44	11.11	22.22	11.11	11.11	0.0
<b>Provides:</b> doc. Ing. Norbert Kopčo, PhD., RNDr. Keerthi Kumar Doreswamy, Ing. Udbhav Singhal, Mgr. Ondrej Spišák					
<b>Date of last modification:</b> 08.01.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ VYZ1/15	<b>Course name:</b> Computational complexity
<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 ECTS credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Oral examination.	
<b>Learning outcomes:</b> To give students theoretical background in computational complexity and theory of NP-completeness.	
<b>Brief outline of the course:</b> 1: Introduction: the notion of computational complexity, computational time, computational model, example - the problem of sorting, computational complexity as an asymptotic function 2: Basic computational models: RAM and RASP computers, the cost of an elementary step on these computers, single-tape Turing machine, multi-tape Turing machine, nondeterministic variants of these computational models, transformations among these models with respect to the time complexity 3: The classes P and NP: basic definitions, presenting (un)undirected graphs on the input, 3COL – the set of all 3-colorable graphs is in NP, 2COL - the set of all 2-colorable graphs is in P, SAT – the set of satisfiable Boolean formulas is in NP, CNF-SAT - Boolean formulas in conjunctive normal form 4: Variants of P and NP: decision problem, the problem of finding a solution, optimization problem, polynomial conversions among different variants 5: NP-completeness: reducibility in polynomial time and its transitivity, definition of the NP-completeness and its basic properties 6: NP-completeness of SAT 7: Variants of SAT: 3CNF-SAT - satisfiability of Boolean formulas in 3-conjunctive normal form, kCNF-SAT, CNF-SAT - satisfiability in k-conjunctive (conjunctive) normal form, 2CNF-SAT is in P 8: 3COL and its variants: 3COL (the problem of coloring vertices of a graph with 3 colors) in NP-complete, consequently: for each $k > 3$ , kCOL (the problem of coloring with k colors) is NP-complete as well 9: Colorability of a planar graph with three colors: presenting a planar graph on the input, the proof of NP-completeness, coloring with a larger number of colors 10: Another NP-complete problems: Exact set cover, Clique, Vertex cover	

- 11: Hamiltonian path: Hamiltonian path in a directed and in undirected graph
- 12: Subset-sum-like problems: Subset Sum - the problem of whether any subset of the integers sum to precisely a target sum, Partition - the problem of whether a given multiset of positive integers can be partitioned into two subsets with equal sums, a “more relaxed” version of Partition - achieving an approximate equality of the sums, distribution of tasks among K parallel processors
- 13: Beyond P a NP: a review of the basic complexity classes - L, NL, P, NP, PSpace, NPSpace, ExpTime, NExpTime, ..., simulation of (non)deterministic space in (non)deterministic time, conversions in opposite directions
- 14: PSpace: QBF - true quantified Boolean formulas, prenex normal form, Pspace completeness of QBF, PSpace = NPSpace

#### **Recommended literature:**

1. J.E. Hopcroft, R.Motwani, J.D. Ullman: Introduction to automata theory, languages, and computation, Addison-Wesley, 2007.
2. M. Sipser: Introduction to the Theory of Computation, Thomson, 2nd edition, 2006.
3. L.A.Hemaspaandra, M.Ogihara: Complexity theory companion, EATCS series, texts in computer science, Springer-Verlag, 2002.
4. S. Arora, B. Barak: Computational Complexity: A Modern Approach, Cambridge Univ. Press, 2009.
5. G.Brassard, P.Bradley: Fundamentals of algorithmics, Prentice Hall, 1996.
6. D.P.Bovet, P.Crescenzi: Introduction to the theory of complexity, Prentice Hall, 1994.
7. C. Calude and J. Hromkovič: Complexity: A Language-Theoretic Point of View, in G. Rozenberg and A. Salomaa, Handbook of Formal Languages II, Springer, 1997.

#### **Course language:**

Slovak or english

#### **Notes:**

Content prerequisites:

Basic notions from the theory of automata and formal languages.

Basic skills in programming and design of algorithms (in any programming language).

Basics knowledge in mathematical logic, set theory, and graph theory.

#### **Course assessment**

Total number of assessed students: 357

A	B	C	D	E	FX
57.7	15.41	12.04	7.28	7.28	0.28

**Provides:** prof. RNDr. Viliam Geffert, DrSc.

**Date of last modification:** 23.11.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚINF/MSSUI/15		<b>Course name:</b> Computer science and didactics of informatics			
<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 ECTS credits:</b> 1					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> II.					
<b>Prerequisites:</b> ÚINF/DIN1b/15 and ÚINF/TIK1/22 and (ÚINF/UGR1/15 or ÚINF/KKV1/21 or ÚINF/UNS1/15 or ÚINF/FO1/15)					
<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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 15					
A	B	C	D	E	FX
46.67	20.0	20.0	6.67	6.67	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 24.04.2017					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## 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 ECTS 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> Mandatory participation in lectures, completion of two semestral written examinations, oral 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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 770					
A	B	C	D	E	FX
74.03	15.45	6.62	2.73	0.52	0.65
<b>Provides:</b> prof. RNDr. Ľubomír Kováč, CSc.					
<b>Date of last modification:</b> 14.12.2021					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## 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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> 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>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 256	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 16.12.2021	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚINF/MPPb/15	
<b>Conditions for course completion:</b> Conditions for ongoing evaluation: <ol style="list-style-type: none"> <li>1. Observations in 6 lessons of the subject of informatics.</li> <li>2. Independent leading of 18 lessons of the subject informatics.</li> <li>3. Participation in analyzes from 20 lessons with a teacher trainer.</li> <li>4. Active participation in out-of-class and after-school activities.</li> </ol> Conditions for the final evaluation: <ol style="list-style-type: none"> <li>1. Submission of 6 observation records from lessons.</li> <li>2. Submission of 18 lesson projects of preparation for lessons.</li> <li>3. Submission of a list of observations and own lesson of the trainee.</li> <li>4. Submission of an evaluation of the trainee's teaching practice.</li> <li>5. Submission of a report on the continuous pedagogical practice.</li> <li>6. Submission of a feedback sheet from the continuous pedagogical practice.</li> </ol> Conditions for successful completion of the course: Fulfillment of all ongoing and final assignments.	
<b>Learning outcomes:</b> Under the professional supervision of an experienced teacher trainer, the student acquires practical pedagogical skills in teaching the subject of informatics. He gets acquainted with school life, out-of-class and after-school activities activities.	
<b>Brief outline of the course:</b> Observations of teacher trainer lessons, consultations of lesson preparations, preparation of teaching aids, leading own lessons, methodological and scientific analysis of lessons, active participation in out-of-class and after-school activities.	
<b>Recommended literature:</b> KOSO VÁ, Beata, Alena TOMENGO VÁ et al., 2015. Profesi jná praktická príprava budúch učiteľov [online]. Banská Bystrica: Vydavateľstvo Belianum, Univerzita Mateja Bela, Banská Bystrica, 226 pp. [cited. 2021-7-28]. ISBN 978-80-557-0860-7. Available from: <a href="https://publikacie.umb.sk/publication/publicationFileDownload.php?ID=18667">https://publikacie.umb.sk/publication/publicationFileDownload.php?ID=18667</a> OROSO VÁ, Renáta and Zuzana BOBEROVÁ, 2016. Pregraduálna príprava učiteľov: Organizácia pedagogickej praxe na UPJŠ [online]. Košice: Univerzita Pavla Jozefa Šafárika	

v Košiciach, 142 pp. [cited 2021-7-28]. ISBN 978-80-8152-460-8. Available from: <a href="https://unibook.upjs.sk/sk/pedagogika/342-pregradualna-priprava-ucitelov-organizacia-pedagogickej-praxe-na-upjs">https://unibook.upjs.sk/sk/pedagogika/342-pregradualna-priprava-ucitelov-organizacia-pedagogickej-praxe-na-upjs</a> BOBEROVÁ, Zuzana, 2017. Začínajúci učiteľ a školská legislatíva I. [online]. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 104 pp. [cited 2021-7-28]. ISBN 978-80-8152-490-5. Available from: <a href="https://unibook.upjs.sk/sk/pedagogika/398-zacinajuci-ucitel-a-skolska-legislativa-i">https://unibook.upjs.sk/sk/pedagogika/398-zacinajuci-ucitel-a-skolska-legislativa-i</a> Current informatics textbooks for primary and secondary schools in Slovakia.	
<b>Course language:</b> Slovak	
<b>Notes:</b> By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.	
<b>Course assessment</b> Total number of assessed students: 16	
abs	n
100.0	0.0
<b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD.	
<b>Date of last modification:</b> 04.08.2021	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## 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 ECTS 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>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 231	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 16.12.2021	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚINF/MPPc/15	
<b>Conditions for course completion:</b> Conditions for ongoing evaluation: <ol style="list-style-type: none"> <li>1. Observations in 8 lessons of the subject of informatics.</li> <li>2. Independent leading of 30 lessons of the subject informatics.</li> <li>3. Participation in analyzes from 30 lessons with a teacher trainer.</li> <li>4. Active participation in out-of-class and after-school activities.</li> </ol> Conditions for the final evaluation: <ol style="list-style-type: none"> <li>1. Submission of 8 observation records from lessons.</li> <li>2. Submission of 30 lesson projects of preparation for lessons.</li> <li>3. Submission of a list of observations and own lesson of the trainee.</li> <li>4. Submission of an evaluation of the trainee's teaching practice.</li> <li>5. Submission of a report on the continuous pedagogical practice.</li> <li>6. Submission of a feedback sheet from the continuous pedagogical practice.</li> </ol> Conditions for successful completion of the course: Fulfillment of all ongoing and final assignments.	
<b>Learning outcomes:</b> Under the professional supervision of an experienced teacher trainer, the student acquires practical pedagogical skills in teaching the subject of informatics. He gets acquainted with school life, out-of-class and after-school activities activities.	
<b>Brief outline of the course:</b> Observations of teacher trainer lessons, consultations of lesson preparations, preparation of teaching aids, leading own lessons, methodological and scientific analysis of lessons, active participation in out-of-class and after-school activities.	
<b>Recommended literature:</b> KOSOVIĆ, Beata, Alena TOMENGOVIĆ et al., 2015. Profesijsna praktička priprava budućih učitel'ov [online]. Banská Bystrica: Vydavateľstvo Belianum, Univerzita Mateja Bela, Banská Bystrica, 226 pp. [cited. 2021-7-28]. ISBN 978-80-557-0860-7. Available from: <a href="https://publikacie.umb.sk/publication/publicationFileDownload.php?ID=18667">https://publikacie.umb.sk/publication/publicationFileDownload.php?ID=18667</a> OROSOVIĆ, Renáta and Zuzana BOBEROVIĆ, 2016. Pregraduálna príprava učiteľov: Organizácia pedagogickej praxe na UPJŠ [online]. Košice: Univerzita Pavla Jozefa Šafárika	

v Košiciach, 142 pp. [cited 2021-7-28]. ISBN 978-80-8152-460-8. Available from: <a href="https://unibook.upjs.sk/sk/pedagogika/342-pregradualna-priprava-ucitelov-organizacia-pedagogickej-praxe-na-upjs">https://unibook.upjs.sk/sk/pedagogika/342-pregradualna-priprava-ucitelov-organizacia-pedagogickej-praxe-na-upjs</a> BOBEROVÁ, Zuzana, 2017. Začínajúci učiteľ a školská legislatíva I. [online]. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 104 pp. [cited 2021-7-28]. ISBN 978-80-8152-490-5. Available from: <a href="https://unibook.upjs.sk/sk/pedagogika/398-zacinajuci-ucitel-a-skolska-legislativa-i">https://unibook.upjs.sk/sk/pedagogika/398-zacinajuci-ucitel-a-skolska-legislativa-i</a> Current informatics textbooks for primary and secondary schools in Slovakia.	
<b>Course language:</b> Slovak	
<b>Notes:</b> By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.	
<b>Course assessment</b> Total number of assessed students: 13	
abs	n
100.0	0.0
<b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD.	
<b>Date of last modification:</b> 04.08.2021	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/ TTUP/15		<b>Course name:</b> Creating Text Teaching Aids			
<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 ECTS credits:</b> 2					
<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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 226					
A	B	C	D	E	FX
57.96	29.65	8.85	2.65	0.88	0.0
<b>Provides:</b> doc. PaedDr. Renáta Orosová, PhD.					
<b>Date of last modification:</b> 20.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KSSFaK/ KJPUAP/15		<b>Course name:</b> Culture of Spoken Discourse			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 1 <b>Per study period:</b> 14 / 14 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 2					
<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>Notes:</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> PhDr. Iveta Bónová, PhD.					
<b>Date of last modification:</b> 24.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ODPU/15	<b>Course name:</b> Defence of diploma thesis
<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 ECTS credits:</b> 15	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> The diploma thesis is the result of the student's own work. It must not show elements of academic fraud and must meet the criteria of good research practice defined in the Rector's Decision no. 21/2021, which lays down the rules for assessing plagiarism at Pavol Jozef Šafárik University in Košice and its components. Fulfillment of the criteria is verified mainly in the process of supervision and in the process of thesis defense. Failure to do so is reason for disciplinary action.	
<b>Learning outcomes:</b> The diploma thesis demonstrates mastery of extended theory and professional terminology of the field of study, acquisition of knowledge, skills and competencies in accordance with the declared profile of the graduate of the study program, as well as the ability to apply them creatively in solving selected field problems. Student demonstrates the ability of independent professional work in terms of content, formal and ethical. Further details on the diploma thesis are determined by Directive no. 1/2011 on the basic requirements of final theses and the Study Regulations of UPJŠ in Košice for the 1st, 2nd and combined 1st and 2nd degree.	
<b>Brief outline of the course:</b> 1. Elaboration of the diploma thesis in accordance with the instructions of the supervisor. 2. Presentation of the results of the diploma thesis before the examination commission. 3. Answering questions related to the topic of the diploma thesis within the discussion.	
<b>Recommended literature:</b> The recommended literature is determined individually in accordance with the topic of the diploma thesis.	
<b>Course language:</b> Slovak and optionally English.	
<b>Notes:</b>	

<b>Course assessment</b>					
Total number of assessed students: 11					
A	B	C	D	E	FX
45.45	9.09	45.45	0.0	0.0	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 19.11.2021					
<b>Approved:</b> prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajči, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ TSM1a/15	<b>Course name:</b> Development and processing of multimedia
<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 ECTS credits:</b> 2	
<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> Conditions for ongoing evaluation: 1. Creation of an educational animation. 2. Creation of a poster with vector and raster graphics. 3. Creation of an educational audio recording. 4. Creation of an instructional educational video. Conditions for successful completion of the course: Obtaining at least 50% of points for ongoing assignments.	
<b>Learning outcomes:</b> After completing this course, students are able to: a) deepen the knowledge of the principles of multimedia and to practice skills in the creation and processing of multimedia, b) create multimedia teaching aids with accompanying methodological commentary for teaching selected topics of school informatics, c) analyze and discuss the issue of teaching the creation and processing of multimedia in school informatics.	
<b>Brief outline of the course:</b> 1. Digitization and processing of raster image. 2. Digitization and processing of raster image. 3. Creating animations. 4. Creation of vector graphics. 5. Creation of vector graphics. 6. Creation of vector graphics. 7. 3D modeling and printing 8. 3D modeling and printing 9. Digitization and sound processing. 10. Digitization and sound processing. 11. Digitization and video processing. 12. Digitization and video processing.	
<b>Recommended literature:</b>	

LACHS, V., 2000. Making Multimedia in the Classroom. London : RoutledgeFalmer. ISBN 0415216842.

GÖBEL, S. et al., 2006. Technologies for Interactive Digital Storytelling and Entertainment (LNCS 4326). Darmstadt : Springer. ISBN 3540499342.

ADÁMEK, R. et al., 2010. Moderná didaktická technika v práci učiteľa. Elfa, s.r.o., Košice. ISBN 978-80-8086-135-3.

GUNIŠ, Ján, Ľudmila JAŠKOVÁ, Katarína MIKOLAJOVÁ and Jana PEKÁROVÁ, 2009. Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika: Multimédia. Bratislava: Štátny pedagogický ústav, 52 p. ISBN 978-80-89225-51-4. Also available from: <https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/multimedia.pdf>

ŠNAJDER, Ľubomír and Marián KIREŠ, 2005. Informatika pre stredné školy - Práca s multimédiami: tematický zošit. Bratislava: Slovenské pedagogické nakladateľstvo. ISBN 80-10-00422-7.

**Course language:**

Slovak and partly English due to selected programs and information sources

**Notes:**

By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.

**Course assessment**

Total number of assessed students: 19

A	B	C	D	E	FX
52.63	21.05	15.79	5.26	5.26	0.0

**Provides:** doc. RNDr. Ľubomír Šnajder, PhD.

**Date of last modification:** 24.08.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/TSM1b/15	<b>Course name:</b> Development and processing of multimedia
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2., 4.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for ongoing evaluation: 1. Programmed SVG image. 2. Programmed animation. 3. Programmed sound or melody. 4. Programmed multimedia application. Conditions for successful completion of the course: Obtaining at least 50% of points for ongoing assignments.	
<b>Learning outcomes:</b> After completing this course, students are able to: a) explain the basic principles and procedures in multimedia programming, b) design and program multimedia applications.	
<b>Brief outline of the course:</b> 1. Programming of still images. 2. Programming of still images. 3. Programming of still images. 4. Programming of still images. 5. Animation programming. 6. Animation programming. 7. Animation programming. 8. Programming of sounds and melodies. 9. Programming of sounds and melodies. 10. Programming of sounds and melodies. 11. Creating a multimedia application. 12. Creating a multimedia application.	
<b>Recommended literature:</b> SATHAYE, Ninad, 2010. Python Multimedia: Beginner's Guide. Birmingham, UK: Packt Publishing. ISBN 978-1-849510-16-5. GUNIŠ, Ján, Viera MICHALIČKOVÁ, Martin CÁPAY a Ľubomír ŠNAJDER, 2020. Riešenie problémov a programovanie [online]. Bratislava: Centrum vedecko-technických informácií SR	

[cited 2021-7-10]. ISBN 9788089965625. Available from: <https://registracia.itakademia.sk/media/themes/nip-rpp.pdf>

BLAHO, Andrej, 2016. Programovanie v Pythone 1 (prednášky k predmetu Programovanie (1) 1-AIN-130/13) [online]. Bratislava: Knižničné a edičné centrum FMFI UK, 322 s. [cited 2021-7-10]. ISBN 978-80-8147-067-7. Available from: <http://python.input.sk/>

**Course language:**

Slovak and partly English due to selected programs and information sources

**Notes:**

By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.

**Course assessment**

Total number of assessed students: 6

A	B	C	D	E	FX
16.67	66.67	16.67	0.0	0.0	0.0

**Provides:** doc. RNDr. Ľubomír Šnajder, PhD.

**Date of last modification:** 24.08.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/VPU/17	<b>Course name:</b> Developmental Psychology for Teachers
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Evaluation of participation in teaching, continuous evaluation of activity in seminars, evaluation of seminar work,	
<b>Learning outcomes:</b> The graduate will understand the principles of developmental psychology, and will be able to characterize the norm in separate developmental stages with a specific focus on the period of school age and adolescence. As part of the seminar work, a students will process current knowledge published in foreign journals. They will have a knowledge about the current social discourse on the topics covered. The graduate will be able to consider various aspects of the possible influence of parents and friends on the development of piupils and apply the knowledge of developmental psychology in the practice of the teacher.	
<b>Brief outline of the course:</b> Determinants and factors of development, cognitive development, personality development. Socialization in separate developmental stages (family, peers, school). Specifics of development in the period of school age, in pubescence and adolescence. Parents and their role in child development. Application of knowledge of developmental psychology in the teacher's practice - communication with students in different developmental stages, creating a teacher-student relationship with respect to the development needs of the student.	
<b>Recommended literature:</b> Vágnerová, M. Vývojová psychologie. Portál, Praha 2000 Říčan, P. Cesta životem. Portál, Praha, 2004. Thorová, K. Vývojová psychologie. Portál, Praha, 2015. Macek, P. Adolescence. Praha: Portál, 2003 Matějček, Z. - různé diela Bačíková, M. Psychológia rodičovskej kontroly, Šafárik Press, Košice 2019	
<b>Course language:</b>	
<b>Notes:</b>	

<b>Course assessment</b>					
Total number of assessed students: 88					
A	B	C	D	E	FX
82.95	11.36	2.27	3.41	0.0	0.0
<b>Provides:</b> doc. Mgr. Mária Bačíková, PhD.					
<b>Date of last modification:</b> 24.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## 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 ECTS 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> It is a profile subject with compulsory participation in lectures and exercises. Continuous control tests after each topic of the lecture, activity during the lecture, prepared and continuously submitted solutions to assignments from the exercises and the final project according to the assignment at the beginning of the semester are evaluated. The final exam is usually oral, in the case of distance learning (due to an epidemic situation, for example) it can be written, and presentations and tests can be held online. The share of the grade from the assessed activities on the final grade: 25% - continuous control tests (maximum is 100 points)* 20% - solutions to assignments from individual exercises (maximum is 100 points)* 5% - activity at the lecture (evaluation is part of the evaluation form) 20% - semester project (evaluation is part of the evaluation form). 30% - the result of the final exam: oral exam if the teaching takes place face-to-face/final online test in the case of distance learning. If the student documents his ECDL certificate, he will be credited with an A grade for one third of the final exam (10% ECDL -A, 20% final exam grade = 30%). * Conversion of points to a grade: A minimum of 50 points out of 100 is required to pass the tests and interim assignments. And 95-100 B 85 - 94 C 65 - 84 D 55 - 64 E 50 - 54 FX 0 - 49 The final grade is calculated as a weighted average according to the standard value of classification grades A to E.	
<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.	

**Brief outline of the course:**

- 1 Didactics of biology in the system of sciences
- 2 Domains of biology education
- 3 Biology standards
- 4 Curriculum and textbooks in SR
- 5 Biological sciences
- 6 Complex of didactic tools of biology
- 7 Hands-on education as an educational concept
- 8 Teaching organization forms
- 9 Lesson preparation
- 10 Principles of knowledge
- 11 Formative and summative evaluation in biology
- 12 Biological educational strategies
- 13 Teaching aids of biology
- 14 School garden and the environment corner at school
- 15 Biological excursion
- 16 Working with talents and biological competitions for students

**Recommended literature:**

Katarína Kimáková Sprievodca didaktikou biológie, 2022 Šafárik press UPJŠ v Košiciach <https://unibook.upjs.sk/img/cms/2022/sprievodca-didaktikou-biologie.pdf>

Ganajová, M. a kol. Formatívne hodnotenie vo výučbe prírodných vied, matematiky a informatiky. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 2021. ISBN 9788081529733.

Ganajová a kol. Formatívne hodnotenie a jeho implementácia do výučby prírodných vied, matematiky a informatiky. Bratislava: Wolters Kluwer SR, 2022. Školstvo. ISBN 9788057104834.

Samuel Kai Wah Chu · Rebecca B. Reynolds, Nicole J. Tavares · Michele Notari, Celina Wing Yi Lee 21st Century Skills Development Through Inquiry Based Learning From Theory to Practice, Springer 2017 <https://link.springer.com/content/pdf/10.1007/978-981-10-2481-8.pdf>

Kimáková, K.: Úvod do štúdia didaktiky biológie, elektronický študijný text, 2008

Kireš, M., Ješková, Z., Ganajová, M., Kimáková K.. Bádateľské aktivity v prírodovednom vzdelávaní, ŠPÚ 2016

Periodical publications for teaching biology. Internal study materials in Moodle <https://lms.upjs.sk/login/index.php>

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

**Course language:**

SK, EN

<b>Notes:</b>					
<b>Course assessment</b>					
Total number of assessed students: 657					
A	B	C	D	E	FX
52.97	29.22	14.16	3.5	0.15	0.0
<b>Provides:</b> doc. RNDr. Katarína Kimáková, CSc., PaedDr. Andrea Lešková, PhD., RNDr. Ivana Slepáková, PhD.					
<b>Date of last modification:</b> 06.02.2023					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ DIN1a/15	<b>Course name:</b> Didactics of informatics
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 <b>Per study period:</b> 42 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 3	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for ongoing evaluation: 1. Proposal of a thematic plan for teaching informatics at secondary or elementary school extended by 1 disponible hour. 2. Creation of a concept map and specific educational objectives for selected topic of school informatics. 3. Creation of a graded system of tasks for teaching selected topic of school informatics. 4. Proposal for the preparation of a lesson with a 5E inquiry cycle. Conditions for successful completion of the course: Obtaining at least 50% of points for ongoing assignments.	
<b>Learning outcomes:</b> After completing this course, students are able to: a) acquire an overview of the objectives, content, modern methods and aids for teaching school informatics, b) create conceptual map, cognitive objectives and graded tasks collection for selected topic of school informatics, c) create a inquiry-based methodology of teaching a selected topic of school informatics.	
<b>Brief outline of the course:</b> 1. Objectives and content of teaching informatics in primary and secondary schools. State educational program. Informatics textbooks. 2. Maturita on informatics. Examples of school educational programs. Designing own thematic plan. 3. Logical structure of the curriculum, conceptual mapping. Determination of specific educational objectives and creation of a concept map for a selected topic of school informatics (RBT). 4. Educational task, its forms, and parameters. A graded system of tasks. 5. Creation of a graded system of tasks for teaching a selected topic of school informatics. 6. Activating methods of teaching school informatics (discussion and situational methods). 7. Activating methods of teaching school informatics (staging methods, educational games, scientific humor). 8. Activating methods of teaching school informatics (problem teaching, peer learning).	



9. Activating methods of teaching school informatics (project teaching, flipped learning).
10. Inquiry-based learning, inquiry cycle, inquiry skills, levels of inquiry, 5E learning cycle.
11. Formative assessment, cognitive and metacognitive tools. Creating a worksheet with selected formative assessment tools.
12. Creating preparation for a lesson with a 5E learning cycle.

**Recommended literature:**

HAZZAN, Orit, Tami LAPIDOT and Noa RAGONIS, 2011. Guide to teaching computer science: an activity-based approach. New York: Springer. ISBN 9780857294425.

LAU, William, 2017. Teaching Computing in Secondary Schools: A Practical Handbook [online]. Taylor & Francis Group, 211 p. [cited 2021-7-10]. ISBN 9781315298191. Available from: <https://ebookcentral.proquest.com/lib/upjs-ebooks/detail.action?docID=5056529>

ČAPEK, Robert, 2015. Moderní didaktika: lexikon výukových a hodnoticích metod. Praha: Grada. Pedagogika (Grada). ISBN 978-80-247-3450-7.

LUKÁČ, Stanislav, Ľubomír ŠNAJDER, Ján GUNIŠ and Zuzana JEŠKOVÁ, 2016. Bádateľsky orientované vyučovanie matematiky a informatiky na stredných školách [online]. Košice: Prírodovedecká fakulta UPJŠ v Košiciach [cited 2021-7-10]. ISBN 978-80-8152-471-4.

Available from: <https://unibook.upjs.sk/img/cms/2016/pf/bov.pdf>

SPENDLOVE, David, 2015. 100 Ideas for Secondary Teachers: Assessment for Learning [online]. Bloomsbury Publishing, 129 p. [cited 2021-7-9]. ISBN 9781472911018. Available from: <https://ebookcentral.proquest.com/lib/upjs-ebooks/detail.action?docID=1990785>

GANAJOVÁ, Mária, Beáta BRESTENSKÁ, Ján GUNIŠ, et al., 2021. Formatívne hodnotenie vo výučbe prírodných vied, matematiky a informatiky. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach. ISBN 978-80-8152-973-3.

GUNIŠ, Ján, Miloslava SUDOLSKÁ and Ľubomír ŠNAJDER, 2009. Ďalšie vzdelávanie učiteľov základných a stredných škôl v predmete informatika: Aktivizujúce metódy vo výučbe školskej informatiky. Bratislava: Štátny pedagogický ústav, 40 p. ISBN 978-80-89225-96-5. Also available from: [https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/aktivizujuce\\_metody.pdf](https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/aktivizujuce_metody.pdf)

**Course language:**

Slovak and partly English due to selected programs and information sources

**Notes:**

By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.

**Course assessment**

Total number of assessed students: 76

A	B	C	D	E	FX
28.95	18.42	21.05	19.74	10.53	1.32

**Provides:** doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.

**Date of last modification:** 01.08.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ DIN1b/15	<b>Course name:</b> Didactics of informatics
<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 ECTS 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> Conditions for ongoing evaluation: <ol style="list-style-type: none"> <li>1. Creation of an interactive educational aid.</li> <li>2. Microteaching with a sample solution of an algorithmic problem.</li> <li>3. Assessment of administered didactic test.</li> <li>4. Creation of an assignment and a commented author's solution of the STEAM task for the PALMA junior competition, correction, and assessment of student solutions.</li> </ol> Conditions for the final evaluation: <ol style="list-style-type: none"> <li>1. Elaboration of a final paper focused on the conceptual process, creation of assignments with various didactic functions, naming misconceptions, and assessment of learning outcomes of selected topics of school informatics.</li> <li>2. Presentation of own teacher's portfolio with discussion.</li> </ol> Conditions for successful completion of the course: Obtaining at least 50% of points for ongoing and final assignments.	
<b>Learning outcomes:</b> After completing this course, students are able to: <ol style="list-style-type: none"> <li>a) select and explain essential concepts for a selected topic of school informatics,</li> <li>b) create and present an assignment and a sample solution to an algorithmic problem,</li> <li>c) analyze and assess students' assignments and identify their misconceptions,</li> <li>d) design and discuss the methodology of teaching a selected topic of school informatics, which includes its own interactive teaching aid,</li> <li>e) complete your own teaching portfolio.</li> </ol>	
<b>Brief outline of the course:</b> <ol style="list-style-type: none"> <li>1. Assessment of students' learning outcomes in school informatics. Didactic tests.</li> <li>2. Assessment of student projects. Student portfolio.</li> <li>3. Conceptual process in school informatics.</li> <li>4. Informatics concepts in informatics competitions (iBobor).</li> <li>5. Informatics concepts in activities outside the computer (Computer Science Unplugged).</li> <li>6. Methodology of teaching selected topics in the field of Representation and tools (coding, compression).</li> </ol>	

7. Methodology of teaching selected topics in the field of Representation and tools (encryption, steganography).
8. Methodology of teaching selected topics in the field of Representation and tools (data analysis and visualization).
9. Methodology of teaching selected topics in the field of Communication and Cooperation (communication and collaboration tools).
10. Methodology of teaching selected topics in the field of hardware and software (kits with sensors and actuators).
11. Methodology of teaching selected topics in the field of Information Society (information security and cybersecurity).
12. Completion of the portfolio of an informatics teacher (thematic plan, preparations from teaching self-reflection of student, worksheet with formative assessment tools, interactive educational aid, sample solution of an algorithmic problem, maturity assignment, system of tasks with increasing difficulty, assessment of an administered didactic test).

#### **Recommended literature:**

HAZZAN, Orit, Tami LAPIDOT and Noa RAGONIS, 2011. Guide to teaching computer science: an activity-based approach. New York: Springer. ISBN 9780857294425.

LAU, William, 2017. Teaching Computing in Secondary Schools: A Practical Handbook [online]. Taylor & Francis Group, 211 p. [cited 2021-7-10]. ISBN 9781315298191. Available from: <https://ebookcentral.proquest.com/lib/upjs-ebooks/detail.action?docID=5056529>

COMPUTER SCIENCE EDUCATION RESEARCH GROUP AT THE UNIVERSITY OF CANTERBURY, NEW ZEALAND. Computer Science Field Guide: An online interactive resource for high school students learning about computer science [online]. [cited 2021-7-10]. Available from: <https://www.csfieldguide.org.nz/en/>

COMPUTER SCIENCE EDUCATION RESEARCH GROUP AT THE UNIVERSITY OF CANTERBURY, NEW ZEALAND. Computer Science without a computer [online]. [cited 2021-7-10]. Available from: <https://csunplugged.org/en/>

QUEEN MARY, UNIVERSITY OF LONDON. Computer Science For Fun: A magazine where the digital world meets the real world [online]. [cited 2021-7-10]. Available from: <http://www.cs4fn.org/>

GUNIŠ, Ján and Ľubomír ŠNAJDER, 2009. Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika: Tvorba úloh a hodnotenie žiakov v predmete informatika. Bratislava: Štátny pedagogický ústav, 40 p. ISBN 978-80-8118-012-5. Also available from: [https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/tvorba\\_ulo\\_h\\_a\\_hodnotenie.pdf](https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/tvorba_ulo_h_a_hodnotenie.pdf)

GUNIŠ, Ján and Ľubomír ŠNAJDER, 2010. Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika: Metodika výučby tematickej oblasti Informácie okolo nás. Bratislava: Štátny pedagogický ústav, 40 p. ISBN 978-80-8118-030-9. Also available from: [https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/metodika\\_informacie\\_okolo\\_nas.pdf](https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/metodika_informacie_okolo_nas.pdf)

GUNIŠ, Ján and Ľubomír ŠNAJDER, 2010. Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika: Metodika výučby tematickej oblasti Komunikácia prostredníctvom IKT. Bratislava: Štátny pedagogický ústav, 32 p. ISBN 978-80-8118-036-1. Also available from: [https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/metodika\\_komunikacia\\_prostrednictvom\\_ikt.pdf](https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/metodika_komunikacia_prostrednictvom_ikt.pdf)

GUNIŠ, Ján and Ľubomír ŠNAJDER. Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika: Metodika výučby oblastí Princípy fungovania IKT a Informačná spoločnosť. Bratislava: Štátny pedagogický ústav, 32 p. ISBN 978-80-8118-045-3. Also

available from: [https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/metodika\\_informacna\\_spolocnost.pdf](https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/metodika_informacna_spolocnost.pdf)

**Course language:**

Slovak and partly English due to selected programs and information sources

**Notes:**

By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.

**Course assessment**

Total number of assessed students: 154

A	B	C	D	E	FX
18.18	33.12	24.03	15.58	8.44	0.65

**Provides:** doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.

**Date of last modification:** 01.08.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ DPRG/19	<b>Course name:</b> Didactics of programming
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 2 <b>Per study period:</b> 14 / 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for ongoing evaluation: <ol style="list-style-type: none"> <li>1. Creation of an assignment and an commented author's solution of a task using several problem-solving strategies.</li> <li>2. Proposal of a pair of maturita assignments with solutions and methodological comments.</li> <li>3. Creation of an assignment and an commented author's solution of the STEAM task for the PALMA junior competition, correction and evaluation of student solutions.</li> </ol> Conditions for the final evaluation: <ol style="list-style-type: none"> <li>1. Creation and presentation of the final project with a collection of solved and commented tasks for a selected topic of programming in Python.</li> <li>2. Elaboration of a final test focused on the elaboration of sample and commented solutions to given problems in Python and Scratch languages.</li> </ol> Conditions for successful completion of the course: Obtaining at least 50% of points for ongoing and final assignments.	
<b>Learning outcomes:</b> After completing this course, students are able to: <ol style="list-style-type: none"> <li>a) define specific educational objectives for a selected topic of programming,</li> <li>b) create assignments and sample solutions for STEAM tasks using various problem-solving strategies,</li> <li>c) analyze and evaluate solutions to student tasks and identify their misconceptions,</li> <li>d) design a methodology for teaching a selected programming topic.</li> </ol>	
<b>Brief outline of the course:</b> <ol style="list-style-type: none"> <li>1. Educational standards in programming in secondary and primary schools. Graduation in informatics.</li> <li>2. Programming competitions.</li> <li>3. Algorithmic thinking. Algorithmic games.</li> <li>4. Computational thinking. Problem solving strategies.</li> <li>5. Data structures around us, algorithms over data structures.</li> <li>6. Teaching selected algorithms and problem solving strategies (recursion).</li> <li>7. Basic concepts and misconceptions of programming.</li> </ol>	

8. Teaching programming in Scratch.
9. Teaching programming in AppInventor.
10. Teaching programming in Python.
11. Programming of mathematical models of selected phenomena/systems.
12. Specifics of computer arithmetic.

#### **Recommended literature:**

BEECHER, Karl, 2017. Computational thinking: A beginner's guide to problem-solving and programming. © BCS Learning & Development, 308 p. ISBN 978-1-78017-36-41.

COMPUTING AT SCHOOL. Computational Thinking Concepts and Approaches Barefoot [online]. [cited 2021-7-12]. Available from: <https://www.barefootcomputing.org/concept-approaches/computational-thinking-concepts-and-approaches>

FINCHER, Sally and Marian PETRE, 2004. Computer science education research. New York: Taylor & Francis. ISBN 9789026519697.

GUTSCHANK, Jörg et al. 2019. coding in STEM Education [online]. Berlin: Science on Stage Deutschland e.V., 76 p. [cited 2021-7-10]. ISBN 978-3-942524-58-2. Available from: [https://www.science-on-stage.eu/sites/default/files/material/coding\\_in\\_stem\\_education\\_en\\_2nd\\_edition.pdf](https://www.science-on-stage.eu/sites/default/files/material/coding_in_stem_education_en_2nd_edition.pdf)

BRIGGS, Jason R., 2013. Python for kids: a playful introduction to programming. San Francisco: No Starch Press. ISBN 1593274076.

BLAHO, Andrej, 2016. Programovanie v Pythone 1 (prednášky k predmetu Programovanie (1) 1-AIN-130/13) [online]. Bratislava: Knižničné a edičné centrum FMFI UK, 322 p. [cited 2021-7-10]. ISBN 978-80-8147-067-7. Available from: <http://python.input.sk/>

ŠNAJDER, Ľubomír and Ján GUNIŠ, 2014. Tvorba úloh pre programátorské súťaže [online]. 1. Košice: Prírodovedecká fakulta UPJŠ v Košiciach, 79 p. [cited 2021-7-10]. ISBN 978-80-8152-139-3. Available from: <https://unibook.upjs.sk/img/cms/2014/pf/tvorba-uloh-pre-prog-sutaze.pdf>

GUNIŠ, Ján and Ľubomír ŠNAJDER, 2021. Programovanie v Pythone 1. Košice: Prírodovedecká fakulta UPJŠ v Košiciach, 170 p. ISBN 978-80-8152-969-6. Also available from: <https://unibook.upjs.sk/img/cms/2021/pf/programovanie-v-pythone-1.pdf>

GUNIŠ, Ján, Viera MICHALIČKOVÁ, Martin CÁPAY and Ľubomír ŠNAJDER, 2020. Riešenie problémov a programovanie [online]. Bratislava: Centrum vedecko-technických informácií SR [cited 2021-7-10]. ISBN 9788089965625. Available from: <https://registracia.itakademia.sk/media/themes/nip-rpp.pdf>

ŠNAJDER, Ľubomír, Gabriela LOVÁSZOVÁ, Viera MICHALIČKOVÁ and Ján GUNIŠ, 2020. Programovanie mobilných zariadení [online]. Bratislava: Centrum vedecko-technických informácií SR, 300 p. [cited 2020-11-30]. ISBN 978-80-89965-63-2. Available from: <https://registracia.itakademia.sk/media/themes/nip-pmz.pdf>

#### **Course language:**

Slovak and partly English due to selected programs and information sources

#### **Notes:**

By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.

#### **Course assessment**

Total number of assessed students: 147

A	B	C	D	E	FX
14.29	33.33	22.45	14.29	12.24	3.4

<b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD.
<b>Date of last modification:</b> 03.08.2021
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## 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 ECTS 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>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 119	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 13.05.2022	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ 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 ECTS 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>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 12	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b>	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ 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 ECTS credits:</b> 2	
<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>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 15	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b>	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## 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 ECTS 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>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 116	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 16.12.2021	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## 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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚBEV/DPP2/14	
<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>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 112	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 16.12.2021	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ 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 ECTS 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>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 7	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b>	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## 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 ECTS 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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 111					
A	B	C	D	E	FX
51.35	33.33	9.01	4.5	1.8	0.0
<b>Provides:</b>					
<b>Date of last modification:</b> 17.02.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/PUDU/15	<b>Course name:</b> Drug Addiction Prevention in Educational Practice
<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 ECTS credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 1., 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> 1st part of the semester evaluation: active participation in the training part (30p). 2nd part of the semester evaluation: active participation in workshops (20p) 3rd part of the semester evaluation - preparation (10p) and implementation (10p) of block activities (20p, minimum 11 points). 4th part of the evaluation - written knowledge exam (20p, minimum 11 points). In total, students can get 90p and the final grade is as follows: 90 - 82: A 81 - 73: B 72 - 66: C 65 - 59: D 58 - 54: E 53 and less: FX. Detailed information in the electronic bulletin board of the course in AIS2. The teaching of the subject will be realized by a combined method.	
<b>Learning outcomes:</b> The student understands principals of research data based prevention of risk behavior, can describe and explain the determinants of risk behavior as well as protective and risk factors for substance use. Understands and adequately interprets the theory explaining the background of substance and non-substance addictions. The student is also able to state and classify the types and forms of prevention, strategies and approaches in prevention, can distinguish effective strategies from ineffective ones. The student is able to apply the learned rules, procedures and competencies for the work of a teacher in the field of drug use prevention, as well as the acquired professional skills for the work of a teacher and prevention coordinator at school.	
<b>Brief outline of the course:</b> Psychological, pedagogical-psychological, medical and legal-forensic aspects of substance use prevention Prevention of substance use based on risk and resilience Primary, secondary and tertiary prevention of substance use Universal, selective and indicated prevention of substance use Effective substance prevention strategies based on research data Preparation and implementation of components of effective substance use prevention programs	
<b>Recommended literature:</b> Orosová, O. a kol. (2012). Základy prevencie užívania drog a problematického používania internetu v školskej praxi. Košice: UPJŠ.	

Sloboda, Z., & Bukoski, J. (Eds.). (2006). Handbook of Drug Abuse Prevention: Theory, Science, and Practice. New York: Springer. National and international scientific journals.					
<b>Course language:</b> slovak					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 371					
A	B	C	D	E	FX
54.18	38.01	7.01	0.81	0.0	0.0
<b>Provides:</b> prof. PhDr. Oľga Orosová, CSc., Mgr. Lucia Barbierik, PhD., Mgr. Lenka Abrinková, PhD., Mgr. Frederika Lučanská, PhD., Mgr. Viera Čurová, Mgr. Marcela Majdanová, PhD.					
<b>Date of last modification:</b> 24.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/VP/09		<b>Course name:</b> Educational Counselling			
<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 ECTS credits:</b> 2					
<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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 208					
A	B	C	D	E	FX
70.67	18.27	7.21	2.88	0.96	0.0
<b>Provides:</b> PhDr. Anna Janovská, PhD.					
<b>Date of last modification:</b> 24.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/ ZSP/15		<b>Course name:</b> Essentials of Special Education			
<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 ECTS 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>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 591					
A	B	C	D	E	FX
59.56	23.52	10.83	4.4	1.18	0.51
<b>Provides:</b> PaedDr. Michal Novocký, PhD.					
<b>Date of last modification:</b> 20.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## 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 ECTS 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> Thematical presentations Oral 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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 1092					
A	B	C	D	E	FX
42.12	24.63	23.35	8.15	1.65	0.09
<b>Provides:</b> RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD.					
<b>Date of last modification:</b> 16.05.2021					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/ ZZP/12		<b>Course name:</b> Experiential Education			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 2 <b>Per study period:</b> 14 / 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 380					
A	B	C	D	E	FX
45.0	37.11	13.95	3.68	0.26	0.0
<b>Provides:</b> doc. PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petriková, PhD.					
<b>Date of last modification:</b> 20.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ FO1/15	<b>Course name:</b> Formal languages and automata
<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 ECTS credits:</b> 5	
<b>Recommended semester/trimester of the course:</b> 1., 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Test and oral examination.	
<b>Learning outcomes:</b> To provide theoretical background for studying computer science in general, by giving the necessary knowledge in theory of automata.	
<b>Brief outline of the course:</b> 1: Pushdown automata: definition of a pushdown automaton, accepting by final states, accepting by empty pushdown 2: Deterministic pushdown automata: examples of application in practice 3: Context-free grammars: basic definition, leftmost derivation, derivation tree, elimination of rules of type $A \rightarrow \epsilon$ and $A \rightarrow B$ , Chomsky normal form 4: Relation between context-free grammars and pushdown automata: transforming context-free grammar to a pushdown automaton, transforming pushdown automaton to a context-free grammar 5: Pumping lemma I: Statement of the lemma and its proof 6: Pumping lemma II: applications of the lemma 7: Closure properties of context-free languages 8: Closure properties of deterministic context-free languages 9: Pushdown automata producing an output: basic definitions and properties, applications in practice 10: Context-sensitive languages: context-sensitive grammar, nondeterministic linear-bounded Turing machine (LBA), transforming context-sensitive grammar to an LBA, transforming LBA to a context-sensitive grammar 11: Closure properties of context-sensitive languages 12: Recursively enumerable languages: phrase-structure grammar, nondeterministic and deterministic Turing machine, transforming nondeterministic Turing machine to a phrase-structure grammar, transforming phrase-structure grammar to a deterministic Turing machine, closure properties 13: Universal Turing machine 14: Algorithmically undecidable problems of the formal language theory	
<b>Recommended literature:</b>	

1. J.E. Hopcroft, R.Motwani, J.D. Ullman: Introduction to automata theory, languages, and computation, Addison-Wesley, 2001.
2. J. Shallit: A second course in formal languages and automata theory, Cambridge University press, 2009.
3. M. Sipser: Introduction to the theory of computation, Thomson Course Technology, 2006.

**Course language:**

Slovak or English

**Notes:**

Content prerequisites:

1. Basic mathematical background (proof by contradiction and by mathematical induction), basic notions from the set theory (union, intersection, complement, cartesian product).
2. Basic knowledge about finite state automata and regular languages.

**Course assessment**

Total number of assessed students: 11

A	B	C	D	E	FX
36.36	36.36	18.18	9.09	0.0	0.0

**Provides:** prof. RNDr. Viliam Geffert, DrSc., Mgr. Alexander Szabari, PhD., RNDr. Dominika Pališínová, RNDr. Juraj Šebej, PhD.

**Date of last modification:** 23.11.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## 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 ECTS 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> Active participation in exercises. The preparation and presentation of a self-planned school experiment and its didactic commentary at the end of the course are evaluated.					
<b>Learning outcomes:</b> Graduates of the course will gain practical experience with the implementation of school experiments and modeling of geological processes and phenomena. At the same time, they will learn the procedures of student research focused on the issue of environmental components and the need for nature protection using digital technologies. Graduates will be able to choose a suitable form for the interpretation of geological and ecological curriculum and methods					
<b>Brief outline of the course:</b> Components of the environment in SEP - Specifics of didactics of geology - Environmental education in biology as part of a cross-cutting theme - Elaboration of thematic units focused on the inanimate nature and ecology in biology textbooks - Motivation of students to protect nature - Research topics for students' work - Modeling of phenomena and processes in the environment - Active involvement pupils in nature protection - Pupils' environmental projects - Educational walks and excursions					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 19					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
<b>Provides:</b> RNDr. Ivana Slepáková, PhD.					

<b>Date of last modification:</b> 05.04.2023
<b>Approved:</b> prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.



## 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 ECTS 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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 917					
A	B	C	D	E	FX
14.29	21.81	31.08	20.72	8.94	3.16
<b>Provides:</b> doc. Ing. Katarína Bónová, PhD.					
<b>Date of last modification:</b> 30.09.2021					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/PsZ/15	<b>Course name:</b> Health Psychology
<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 ECTS 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> Active participation in seminars, preparation and presentation of seminar work, final evaluation	
<b>Learning outcomes:</b> The aim of the course is to provide students with the latest knowledge and background of Health Psychology as well as forms of its application in order to improve the mental and physical health of individuals and society. The graduate of the course will understand the principles of health psychology, will be familiar with the current social discourse on the topics covered. The student will learn to use the acquired knowledge in school practice.	
<b>Brief outline of the course:</b> <ol style="list-style-type: none"> <li>1. Health psychology. Definition of health. Bio-psycho-social model of health.</li> <li>2. Mental health and quality of life, well being.</li> <li>3. Physiological aspects of mental health, lifestyle</li> <li>4. Stress. Coping, resilience.</li> <li>5. Psychosomatic diseases, placebo.</li> <li>6. Social support and its importance for health.</li> <li>7. Burnout syndrome.</li> <li>8. The meaning of life, faith.</li> <li>9. Health-related behavior and prevention. Risky behavior, excessive use of the Internet and screens.</li> <li>10. Socio-economic inequalities in health. Unemployment and health.</li> </ol>	
<b>Recommended literature:</b> Křivohlavý, J.: Psychologie zdraví. Praha: Portál, 2001 Kebza, V.: Psychosociální determinanty zdraví. Praha: Academia, 2005 Křivohlavý, J.: Psychologie nemoci. Praha : Grada, 2002 Sarafino, E.P.: Health Psychology: Biopsychosocial Interactions, John Wiley & Sons, 2007 Taylor, E.: Health Psychology. Singapore: McGraw-Hill, 2006 Vollrath M.E.: Handbook of Personality and Health. Chichester: John Wiley & Sons, 2006	
<b>Course language:</b>	
<b>Notes:</b>	

<b>Course assessment</b>					
Total number of assessed students: 111					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
<b>Provides:</b> doc. Mgr. Mária Bačíková, PhD.					
<b>Date of last modification:</b> 22.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ SBD/08		<b>Course name:</b> History of Biology Seminar			
<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 ECTS 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> Introduction to history of science, especially biology					
<b>Brief outline of the course:</b> Introduction to history of biology (and related scientific areas) from ancient times, through middle ages to present.					
<b>Recommended literature:</b> Magner, L.N. (2002) A history of the life sciences. Marcel Dekker, Inc.					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 454					
A	B	C	D	E	FX
97.58	2.42	0.0	0.0	0.0	0.0
<b>Provides:</b> prof. RNDr. Martin Bačkor, DrSc.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## 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 ECTS 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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 1017					
A	B	C	D	E	FX
39.82	23.3	24.09	7.08	2.06	3.64
<b>Provides:</b> RNDr. Vlasta Demečková, PhD.					
<b>Date of last modification:</b> 13.05.2021					

**Approved:** prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajči, PhD., prof. RNDr. Lubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚINF/TIK1/15		<b>Course name:</b> Information theory, encoding			
<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 ECTS credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Satisfiable knowledge of basic notions					
<b>Learning outcomes:</b> To understand principles of lossless coding and entropy and their mutual relationship.					
<b>Brief outline of the course:</b> 1. Word and language 2. Decodable codes 3. Prefix-free codes 4. Kraft-McMillan inequality 5.-7. Entropy 8.-9. Price of code sequence 10. Shannon's theorem 11. Fano's code sequence 12. Huffman's optimal code sequence					
<b>Recommended literature:</b> 1. D. Hankersson, G. Harris, P. Johnson: Introduction to Information Theory and Data Compression, CRC Pr., 1998. 2. J. Adámek: Kódování a teorie informace, Vydavatelství ČVUT, Praha 1994 3. J. Černý: Entropia a informácia v kybernetike, Alfa 1981					
<b>Course language:</b> Slovak					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 99					
A	B	C	D	E	FX
61.62	14.14	14.14	3.03	0.0	7.07
<b>Provides:</b> prof. RNDr. Stanislav Krajčí, PhD.					

<b>Date of last modification:</b> 23.11.2021
<b>Approved:</b> prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/UPN/17	<b>Course name:</b> Introduction into Psychology of Religion
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> The assessment is based on the interim evaluation. The subject will be taught in both present and distance format. Up-to-date information concerning the subject for the given academic year can be found on the electronic board of the subject in the Academic information system of the UPJŠ.	
<b>Learning outcomes:</b> The student will acquire a basic overview of the origin and current state of knowledge in the field of research and application the psychology of religion. He/she will be able to described, explaine, and evaluate this knowlege. The student will be able to apply the acquired knowledge in the basic orientation in the field, and develop critical thinking and will be able to apply and integrate already acquired knowledge from other (psychological) distributions	
<b>Brief outline of the course:</b> <ol style="list-style-type: none"> <li>1. History of psychology of religion in national and world context</li> <li>2. Psychological perspective on religion and religious experience</li> <li>3. Psychology of religion in an interdisciplinary context</li> <li>4. Basic approaches to psychological interpretation and selected views</li> <li>5. Different types of religious experience</li> <li>6. Psychological view of religion from a biodromal perspective</li> <li>7. Spirituality versus religiosity in a postmodern society</li> <li>8. Coping in the context of religiosity</li> <li>9. Psychotherapy and religion, pastoral psychology</li> </ol>	
<b>Recommended literature:</b> Eliade, M. (1994). Posvátné a profánní. Praha: Česká křesťanská akademie. Eliade, M. (1995). Dějiny náboženského myšlení 1. Praha: Oikoymenh. Freud, S. (1999). Nutkavá jednání a náboženské úkony. In Freud, S., Spisy z let 1906–1909. Praha: Psychoanalytické nakladatelství. Fromm, E. (2003). Psychoanalýza a náboženství. Praha: Aurora Erikson, E. (1996). Mladý muž Luther: studie psychoanalytická a historická. Praha: Psychoanalytické nakladatelství. James, W. (1930). Druhy náboženské zkušenosti. Praha: Melantrich. Jung, C. G. (1993). Analytická psychologie: Její teorie a praxe. Praha: Academia.	

Křivohlavý, J. (2000). Pastorální péče. Praha: Oliva Pargament, K. (1997), Psychology of religion and coping, Říčan, P. (2007). Psychologie náboženství a spirituality. Praha: Portál. Říčan P. (2002), Psychologie náboženství, Portál, Praha, Stríženec, M. (2001) Súčasná psychológia náboženstva					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 55					
A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0
<b>Provides:</b> Mgr. Jozef Benka, PhD.					
<b>Date of last modification:</b> 24.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## 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 ECTS 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> oral examination	
<b>Learning outcomes:</b> Fundamental parameters and relations in ecological science. Abiotic, biotic and anthropogenic factors in air, aquatic and terrestrial/soil environment. Autecology, Demecology and Synecology. Ecosystem and Nature Protection.	
<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. 1. Basic ecological terms. 2. Characterisation of the basic ecological factors (light, temperature, water). 3. Air environment (composition of atmosphere, physical and chemical factors, air pollutants, organisms and their adaptations in air environment). 4. Aquatic environment (water properties physical and chemical factors, gases in water, water pollutants, eutrophication and saprobity, aquatic organisms). 5. Soil environment (physical and chemical properties, soil profile, humus layer, soil pollutants, soil organisms and their adaptations). 6. Characterization of Populations, structure and population dynamics. 7. Biocenoses and biotops. 8. Qualitative and quantitative community characteristics. 9. Ecosystems. 10. Biomes and their characteristics, 11. Biodiversity-factors affecting biodiversity, Species-Area relationships. 12. Biodiversity protection. 13. Biospheric cycles.	
<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>Notes:</b>	

<b>Course assessment</b>					
Total number of assessed students: 1770					
A	B	C	D	E	FX
20.23	17.68	25.14	17.4	11.81	7.74
<b>Provides:</b> RNDr. Natália Raschmanová, PhD.					
<b>Date of last modification:</b> 16.03.2023					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/ZMPPV/15	<b>Course name:</b> Introduction to Research Methodology in Education and Psychology
<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 ECTS credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> KPPaPZ/PPgU/15 and KPE/PDU/15	
<b>Conditions for course completion:</b> - active participation in seminars, presentation of assignments in groups, final exam	
<b>Learning outcomes:</b> The graduate of the course will gain information about the research methodology, will understand the basic methods of pedagogical and psychological research that can be used in the practice of the teacher. Within the seminars, students will develop professional skills through their own demonstration of a specific research method. The graduate of the course will be able to carry out simple scientific research, present the results of research and read the results of the latest research in the field of pedagogy and psychology.	
<b>Brief outline of the course:</b> Research in pedagogy and psychology. Scientific research, scientific thinking. Parts of a research project. Research planning. Topic selection, research problem formulation. Types of research plans. Hypothesis, variables, operationalization. Ethical issues of scientific research. Experiment (experiment problems, control of variables in the experiment). Experimental plans, quasi-experiment. Reliability and validity of research. Research sample, methods of sample selection. Data collection techniques - questionnaire, interview, sociometry, semantic differential, observation, tests. Introduction to qualitative methodology. Possibilities of quantitative data processing. How to write a scientific article, presentation, poster, qualification work. Interpretation of findings, integration of findings into context.	
<b>Recommended literature:</b> Bačíková, M., Janovská, A., Orosová, O. Základy metodológie pedagogicko-psychologického výskumu. 2.doplnené vydanie. Šafárik Press, 2019. dostupné online: <a href="https://unibook.upjs.sk/img/cms/2019/FF/zaklady-metodologie-ped-psych-vyskumu-2-vyd-web.pdf">https://unibook.upjs.sk/img/cms/2019/FF/zaklady-metodologie-ped-psych-vyskumu-2-vyd-web.pdf</a> Gavora, P.: Úvod do pedagogického výskumu. Bratislava, UK 1999. Švec, Š. a kol.: Metodológia vied o výchove. Bratislava, Iris 1998. Turek, I.: K základom pedagogického výskumu. Prešov, KPÚ 1991. Ferjenčík, J.: Úvod do metodológie psychologického výskumu. Praha, Portál 2000. <a href="http://www.e-metodologia.fedu.uniba.sk/">http://www.e-metodologia.fedu.uniba.sk/</a>	
<b>Course language:</b>	

<b>Notes:</b>					
<b>Course assessment</b>					
Total number of assessed students: 716					
A	B	C	D	E	FX
19.41	27.09	24.72	19.55	9.08	0.14
<b>Provides:</b> doc. Mgr. Mária Bačíková, PhD., PhDr. Anna Janovská, PhD.					
<b>Date of last modification:</b> 24.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚINF/ UGR1/15		<b>Course name:</b> Introduction to computer graphics			
<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 ECTS 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>					
<b>Learning outcomes:</b> To provide the students with knowledge of graphics algorithms and basic principles of computer graphics.					
<b>Brief outline of the course:</b> Graphics hardware, input and output devices. Color models, palettes. Raster graphics algorithms for drawing 2D primitives. Filling and clipping. Curve modeling, interpolations and approximations, spline forms, Bézier curves, B-splines, surfaces. Homogenous coordinates, affine transformations, perspective and parallel projections. Visible-surface determination, illumination and shading. Rendering techniques, photorealism, textures, ray tracing, radiosity. Object representations, computer animation, virtual reality.					
<b>Recommended literature:</b> FOLEY, J. D., van DAM, A., FEINER, S., HUGHES, J.: Computer Graphics: Principles and Practice, Addison-Wesley, 1991 MORTENSON, M.E.: Geometric modeling, 2.ed., Willey, 1997					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 311					
A	B	C	D	E	FX
13.18	10.29	13.83	23.47	30.87	8.36
<b>Provides:</b> RNDr. Rastislav Krivoš-Belluš, PhD.					
<b>Date of last modification:</b> 08.01.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ UNS1/15	<b>Course name:</b> Introduction to neural networks
<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 ECTS credits:</b> 5	
<b>Recommended semester/trimester of the course:</b> 1., 3.	
<b>Course level:</b> I., II., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> The condition for passing the course is the realization of a project with the application of neural networks, successful completion of two written tests in the field of neural networks, their basic types, and genetic algorithms, as well as successful completion of the written and oral part of the exam.	
<b>Learning outcomes:</b> The result of the education is an understanding of the basic principles of neural networks and genetic algorithms. The student will gain the ability to apply the acquired knowledge in intelligent data analysis and also work with a selected tool for modeling neural networks.	
<b>Brief outline of the course:</b> <ol style="list-style-type: none"> <li>1. Basic concept arising from biology. Linear threshold units, polynomial threshold units, functions calculable by threshold units.</li> <li>2. Perceptrons. Linear separable objects, adaptation process (learning), convergence of perceptron learning rule, higher order perceptrons.</li> <li>3. Forward neural networks, hidden neurons, adaptation process (learning), backpropagation method.</li> <li>4. Recurrent neural networks. Hopfield neural networks, properties, associative memory model, energy function, learning, optimization problems (business traveler problem).</li> <li>5. Model of gradually created network. ART network, architecture, operations, initialization phase, recognition phase, search and adaptation phase. Use of the ART network.</li> <li>6. Applications of studied models in solving practical problems.</li> <li>7. Written test I.</li> <li>8. Motivation to model genetic elements. Genetic algorithm. Application of genetic algorithms.</li> <li>9. Genetic programming, root trees, Read's linear code. Basic stochastic optimization algorithms: blind algorithm and climbing algorithm. Forbidden search method.</li> <li>10. Genetic and evolutionary programming with typing, examples of use. Grammatical evolution.</li> <li>11. Special techniques of evolutionary computations. Selection mechanisms in evolutionary algorithms.</li> <li>12. Use of genetic algorithms in training neural networks. Artificial life.</li> <li>13. Written test II.</li> </ol>	



**Recommended literature:**

1. AGGARWAL, Charu C. Neural networks and deep learning: a textbook. Cham: Springer, 2018. ISBN 978-3319944623.
2. KVASNIČKA, Vladimír. Úvod do teórie neurónových sietí. [Slovenská republika]: IRIS, 1997. ISBN 80-88778-30-1.
3. KVASNIČKA, Vladimír. Evolučné algoritmy. Bratislava: Vydavateľstvo STU, 2000. Edícia vysokoškolských učebníc. ISBN 80-227-1377-5.
4. MITCHEL, Melanie. An Introduction to Genetic Algorithms. Cambridge: MIT Press, 2002. ISBN 0-262-63185-7.
5. SINČÁK, Peter, ANDREJKOVÁ, G. Úvod do neurónových sietí, I. diel, Košice: ELFA, 1996. ISBN 808878638X

**Course language:**

Slovak or English

**Notes:**

Content prerequisites:

Basics of programming in Python, or another alternative programming language suitable for data analysis

**Course assessment**

Total number of assessed students: 472

A	B	C	D	E	FX
17.16	17.58	22.25	17.8	21.19	4.03

**Provides:** doc. RNDr. Ľubomír Antoni, PhD., RNDr. Šimon Horvát, PhD.

**Date of last modification:** 23.11.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ LOP1/15	<b>Course name:</b> Logic programming
<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 ECTS credits:</b> 5	
<b>Recommended semester/trimester of the course:</b> 2., 4.	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Evaluation of active participation in exercises and homework, test of theoretical knowledge during the semester. Written and oral exam together with assessment from exercises.	
<b>Learning outcomes:</b> To learn bases of declarative programming (as complementary method to procedural programming) and basic methods of implementations of logic programming languages.	
<b>Brief outline of the course:</b> <ol style="list-style-type: none"> <li>1. Introduction to logic</li> <li>2. theory, models, Herbrand model</li> <li>3. SLD resolution</li> <li>4. Basics of Prolog language</li> <li>5. Prologue in examples</li> <li>6. Lists</li> <li>7., 8., 9. Data analysis in Prolog</li> <li>10., 11., 12. Graph theory in Prolog</li> </ol>	
<b>Recommended literature:</b> BRATKO, Ivan. Prolog. Programming for Artificial Intelligence. 2 ed. Wokingham: Addison-Wesley, 1990. ISBN 0-201-41606-9. NILSON U., MALUSINSKI J.: Logic, Programming and Prolog, John Wiley & Sons Ltd. 1995 NIENHUYIS-CHENG Sh.H., WOLF R.: Foundations of Inductive Logic Programming, Springer-Verlag, 1997	
<b>Course language:</b> Slovak or English	
<b>Notes:</b> Prerequisites: none	

<b>Course assessment</b>					
Total number of assessed students: 307					
A	B	C	D	E	FX
23.78	14.01	14.33	22.8	23.45	1.63
<b>Provides:</b> doc. RNDr. Ondrej Krídlo, PhD.					
<b>Date of last modification:</b> 23.11.2021					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## 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 ECTS 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 at practical classes (at least 90%), 2 written examinations during the semester, final oral examination.					
<b>Learning outcomes:</b> Students will obtain basic knowledge 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> History of microbiology; microbial cell structure, function and metabolism; genetics, classification and taxonomy of microorganisms; viruses; introduction to environmental and applied microbiology. Activities of microorganisms in terms of their importance for humans and the environment.					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 1318					
A	B	C	D	E	FX
26.63	12.37	16.24	18.89	21.55	4.32
<b>Provides:</b> doc. RNDr. Peter Pristaš, CSc., RNDr. Mária Piknová, PhD., RNDr. Mariana Kolesárová, PhD., RNDr. Lenka Maliničová, PhD.					
<b>Date of last modification:</b> 23.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚFV/ FEP1/07	<b>Course name:</b> Microcomputer Based Science Laboratory
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 2 <b>Per study period:</b> 14 / 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 4	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Terms and conditions of assessment during the semester -participation in classes in accordance with study regulations and teacher's instructions -active participation at seminars and exercises -submitting all the assignments in accordance with teacher's instruction -realization, presentation and defence of the final assignment Final assessment: -based on assessment during the semester Conditions for successful completion of the course: -participation in lessons in accordance with the study regulations and teacher's instructions -achieving the level higher than 50 % in assessment during the semester and in final assessment	
<b>Learning outcomes:</b> By the end of the course student gains an overview about the possible use of digital technologies to support active learning in science implementing methods of inquiry-based science education. He gains skills to use and develop activities on measuring data with the help of datalogging, measuring on videorecordings and picture and modeling processes. Student is able to implement such activities in science teaching to support active learning, conceptual understanding and inquiry skills' development.	
<b>Brief outline of the course:</b> 1. Inquiry-based science education (IBSE). Inquiry skills. Digital technologies to enhance IBSE. 2. Inquiry teaching and learning in computer-based laboratory. Digital tools for data collection, videomeasruement, modeling and data processing and analysis. 3. Data collection in real experiment with the help of sensors. 4. Processing and analysis of data gained with the help of sensors. 5.Activities on real-time measurements and processing and data analysis implementing IBSE methods. 6. Videomeasurement. How to measure on videorecording and picture. 7. Processing and analysis of data gained from videomeaurement. 8. Activities on videomeasurement and processing and data analysis implementing IBSE methods	

9.Mathematical modeling with the help of computer. Role of computer modeling in science education. 10. Activities on computer modeling implementing IBSE methods. 11.Inquiry-based science education and methods of assessment. 12.Lesson design implementing digital technologies and IBSE methods.					
<b>Recommended literature:</b> DEMKANIN, Peter a kol.: Počítačom podporované prírodovedné laboratórium, Knižničné a edičné centrum FMFI UK Bratislava, 2006 Learning by doing the CMA way, dostupné na <a href="https://cma-science.nl/">https://cma-science.nl/</a>					
<b>Course language:</b> Slovak English					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 34					
A	B	C	D	E	FX
44.12	44.12	11.76	0.0	0.0	0.0
<b>Provides:</b> doc. RNDr. Zuzana Ješková, PhD.					
<b>Date of last modification:</b> 15.09.2021					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚFV/ MDT/19	<b>Course name:</b> Modern Didactical Technology
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Summary evaluation based on ongoing assessment: 1. Active participation at the seminars (in the contact or online form) with minimum 80% participation. 2. Practical ongoing assignments (10) and their defense. At least 50% must be obtained from each assignment elaborated according to assessment criteria.	
<b>Learning outcomes:</b> Student graduated from subject will be able: - recognize current available digital tools and their parameters for educational activities, - to use all types of actual digital tools in education of science or humanities, - to design and realize educational activities by using the modern technologies.	
<b>Brief outline of the course:</b> 00. Introduction - goals and didactic principles 01. Modern hybrid classroom in 21st century 02. Digital learning spaces in 21st century 03. Cloud repositories, services, modern web-browser 04. Cloud editors for notes, texts, spreadsheets and presentations 05. Digital text (scan, OCR, voice recognition, Kami pdf) 06. Digital image and audio (digital recording and editing) 07. Interactive E-voting and videoconference systems in education 08. Digital collaborative technologies (social e-reader, collaborative whiteboard) 09. Virtual and digitally based experiments, digital databases 10. Education video (digital recording and editing) 11. Smartphone and tablet in classic and blended education 12. Teaching tools and digital teacher's workspace	
<b>Recommended literature:</b> 1. Kireš, M. et al.: Modern didactical technics in teacher practice (in Slovak), Košice: Elfa, 2010 2. Redecker, C., & Punie, Y. (2017). European Framework for the Digital Competence of Educators: DigCompEdu. Luxembourg: Publications Office of the European Union.	

3. C. R. Tucker, T. Wycoff, J. T. Green, Blended Learning in Action: A Practical Guide Toward Sustainable Change. Thousand Oaks: Corwin Press, 2016.
4. D. Bannister, Guidelines on Exploring and Adapting: LEARNING SPACES IN SCHOOLS. Brussels: European Schoolnet, 2017.
5. current information from web sites related to didactical technologies,  
catalogues of teaching tools,  
current articles about modern trends in science and humanities education.

**Course language:**

Slovak, English

**Notes:**

**Course assessment**

Total number of assessed students: 96

A	B	C	D	E	FX
53.13	30.21	11.46	3.13	2.08	0.0

**Provides:** doc. RNDr. Jozef Hanč, PhD.

**Date of last modification:** 07.07.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/ PDK/17		<b>Course name:</b> Pedagogical Communication			
<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 ECTS credits:</b> 2					
<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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 144					
A	B	C	D	E	FX
73.61	24.31	2.08	0.0	0.0	0.0
<b>Provides:</b> Mgr. Katarína Petříková, PhD.					
<b>Date of last modification:</b> 20.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/ PDD/17		<b>Course name:</b> Pedagogical Diagnostics			
<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 ECTS credits:</b> 2					
<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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 85					
A	B	C	D	E	FX
83.53	11.76	4.71	0.0	0.0	0.0
<b>Provides:</b> PaedDr. Michal Novocký, PhD.					
<b>Date of last modification:</b> 20.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPE/ PPD/15	<b>Course name:</b> Pedagogy and Psychology
<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 ECTS credits:</b> 1	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> II.	
<b>Prerequisites:</b> KPE/PDU/15 and KPPaPZ/PPgU/15	
<b>Conditions for course completion:</b> Obtaining the required number of credits in the prescribed composition by the study plan.	
<b>Learning outcomes:</b> Verification of the acquired competencies of the student in accordance with the profile of the graduate.ie required number of credits in the prescribed composition by the study plan.	
<b>Brief outline of the course:</b> Pedagogy: 1. Pedagogy, basic pedagogical categories, system of pedagogical scientific disciplines. 2. Education, pages and functions of education, educational process, self-education.3. Factors of education, educated individual, pedagogue, pedagogical profession, professional competencies.4. School education, family education. 5. Educational goals, taxonomy, requirements, classification of educational goals.6. Methods of education. 7. Pedagogical principles. 8. School system of the Slovak Republic. 9. Didactics, basic questions of didactics, current starting points of didactics. 10. Objectives of the teaching process, the teacher's work with the objectives of teaching.11. Content of education, basic curriculum, extension curriculum, elements and components of curriculum. 12. Assessment in school education, types, functions and criteria of assessment.13. Pedagogical control, methods and forms of pedagogical control.14. Teacher's work planning, written preparation of the teacher for teaching.15. Teaching process, stages of the teaching process and their didactic functions.16. Organizational forms of teaching, lesson, stages, types of lessons.17. Teaching methods, classification, functions, selection of teaching methods. 18. Didactic principles of the teaching process. 19. Basic pedagogical documents, textbook, functions and structural components of the textbook.20. Current concepts of the teaching process. Psychology: 1.Psychology as a science, goals and subject of psychology in terms of influential psychological directions.2.Pedagogical psychology in teacher training, its subject, function.3.Psychology in school practice: professional forms of control and assistance, psychological examination, counseling process. Crisis intervention. Code of ethics.4.Psychology in school practice: approaches and models of prevention, prevention spectrum, protective and risk factors of risk behavior of schoolchildren in the context of the theory of triadic influence.5.Psychology in school practice: effective strategies for prevention of substance use.6.Psychology of education from from the point of view of psychodynamic approach (Psychoanalysis and Individual Psychology) .7.Psychology of education from the point of	

view of humanistic psychology.8. Psychology of education from the point of view of cognitive psychology.9. Psychology of learning and types of learning supplemented by examples from school practice. / success in the context of individual theories of cognitive development.11. Nutritional peculiarities, school non-success / intelligence in terms of intelligence.12. Memory and developmental peculiarities, school non-success 13. Attention and developmental peculiarities, school non / success peculiarities of individual types of family, educational styles.15. Social relations at school, the modes of cognition of interaction U and Ž. Psychosocial climate of school class and school, methods of cognition, sociometry.16. Social influence: presence of others, interpersonal influences and meaningful understanding of social influence in teacher's work.17. Teacher as a professional, his professional ability, teaching style, attitudes towards students, expectations towards students, coping with stress, burnout syndrome.18. Students: gifted and talented, school failure, non-thriving pupils and failing pupils, pupils' self-efficacy.19. Types of research plans and their creation (setting goals, hypotheses, variables, selection of research sample) in the context of pedagogical-psychological research.20. Selected methods of pedagogical-psychological research - questionnaire, interview, observation and possibilities of their use in school practice.

### **Recommended literature:**

#### **Pedagogika:**

- Čapek, R. (2016). Moderní didaktika. Praha: Grada.  
 Dytrtová, R., Krhutová, M. (2009). Učitel. Příprava na profesi. Praha: Grada.  
 Kalhous, Z., Obst, O. (2002). Školní didaktika. Praha: Portál.  
 Petlák, E. (2016). Všeobecná didaktika. Bratislava: Iris.  
 Petlák, E. (2005). Kapitoly zo súčasnej didaktiky. Bratislava: IRIS.  
 Prucha, J. (2017). Moderní pedagogika. Praha: Portál.  
 Turek, I. (2014). Didaktika. Bratislava: Wolters Kluwer.  
 Vališová, A., Kasíková, H. (2010). Pedagogika pro učitele. Praha: Grada.  
 Zormanová, L. (2014). Obecná didaktika. Praha: Grada.

#### **Psychológia:**

- Mareš, J. (2013). Pedagogická psychologie. Praha : Grada.  
 Mareš, J., ČÁP, J. (2001). Psychologie pro učitele. Praha: Portál.  
 Džuka, J. (2003). Základy pedagogickej psychológie. Prešov: UK.  
 Orosová, O. a kol. (2005). Psychológia a pedagogická psychológia 1. Košice: UPJŠ.  
 Orosová, O. a kol. (2012). Základy prevencie užívania drog a problematického používania internetu v školskej praxi. Košice: UPJŠ.  
 Bačíková, M., Janovská, A. (2019). Základy metodológie pedagogicko-psychologického výskumu. Sprievodca pre študentov učiteľstva. 2. rozšírené vydanie. Šafárik press, Košice.  
 Gavora, P. a kol. (2010). Elektronická učebnica pedagogického výskumu. Bratislava: Univerzita Komenského. Dostupné online na [www.e-metodologia.fedu.uniba.sk](http://www.e-metodologia.fedu.uniba.sk).  
 Vágnerová, M. (2005). Základy psychológie. Praha : Karolinum.  
 Vágnerová, M. (2005). Vývojová psychológia. Praha : Karolinum.  
 Vágnerová, M. (2005). Škoní podadenská psychologie pro pedagogy. Praha : Karolinum.  
 Výrost, J., Slaměník, I. (2008). Sociální psychologie. Praha : Grada.  
 Výrost, J., Salměník, I. (1998). Aplikovaná sociální psychologie I. Praha: Portál. Strana: 2  
 Fontana, D. (1997). Psychologie ve školní praxi. Praha: Portál.  
 Zelina, M. (2011). Stratégie a metódy rozvoja osobnosti dieťaťa: (metódy výchovy). Bratislava, Iris.  
 Křivohlavý, J. (2004). Pozitivní psychologie. Praha: Portál.  
 Křivohlavý, J. (2003). Psychologie zdraví. Praha: Portál.

<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b>					
Total number of assessed students: 574					
A	B	C	D	E	FX
27.7	28.75	25.61	14.46	3.14	0.35
<b>Provides:</b>					
<b>Date of last modification:</b> 07.06.2021					
<b>Approved:</b> prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajči, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## 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 ECTS 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> 1. Lectures are optional, but highly recommended due to the presentation of otherwise difficult-to-access information and its synthesis. 2. In addition to the exam, the student must complete a mandatory 5-hour field trip focusing on the aspects that determine the spread of plants on Earth, solve practical tasks from the topic of the subject and prepare a semester presentation on the given topic, the presentation is defended at a scientific mini-conference.	
<b>Learning outcomes:</b> After completing the subject, the student is oriented in various aspects of phytogeographic issues and can apply the acquired knowledge both in basic research within chorology, historical and regional phytogeography, as well as in the evaluation of world biomes. The practical application of the subject is within the study of geographically and climatically conditioned changes in vegetation, in the assessment of the reduction of biodiversity and the extinction of the natural plant communities of the Earth, and the acquired knowledge can be used in work in environmental protection.	
<b>Brief outline of the course:</b> 1. History of the subject. Plants and environment. Dynamics of the earth's surface. 2. Abiotic and biotic factors of the plant environment. 3. Chorology, range, areal disjunctions, relics, endemism, vicarism. 4. Elements of flora - older and newer approaches. 5. Main features of florogenesis. Paleozoic, Mesozoic, Cenozoic. 6. Main features of florogenesis. Cenozoic - Pleistocene, Holocene. 7. Basics of GIS (geographic information systems) and their use in botanical research. 8. Postglacial development of vegetation in Slovakia. 9. Current changes in terrestrial vegetation and their study, plant invasions. 10. Geography of vegetation: from tropical rainforests to tundra I. 11. Geography of vegetation: from tropical rainforests to tundra II. 12. Geographical origin of cultivated plants. Seminars and exercises consist of a 5-hour excursion focusing on the connections and conditionality of plant distribution and indoor exercises focusing on an overview of phytogeographical literature, atlases of plant distribution and their importance, types of mapping, types of areas, practical	

assessment of floristic elements and types of disjunctions , work with maps of specific taxa throughout Europe. Further: regional phytogeography of the Earth, historical overview of opinions on the phytogeographical (floristic) division of Slovakia. Plant phylogeography. Student presentations of final semester theses (phytogeographical mini-conference).					
<b>Recommended literature:</b> Hendrych R.: Fytogeografie. - SPN, Praha 1984. Prach K., Štech M., Říha P.: Ekologie a rozšíření biomů na Zemi. - Scientia, Praha 2009. Krippel E.: Postglaciálny vývoj vegetácie Slovenska. – Veda, vyd. SAV, Bratislava, 1986. Dahl, E.: The Phytogeography of Northern Europe, - Cambridge University Press, 2007. Brown J. H., Lomolino M. V.: Biogeography. - Sinauer Associates, Sunderland, 1998. Myers A. A., Giller P. S.: Analytical Biogeography. - Chapman & Hall, 1990. Various literature devoted to the geography of vegetation (mainly nature and travel), articles in National Geographic, Živa, Vesmír and other magazines.					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 388					
A	B	C	D	E	FX
38.92	22.42	21.13	8.25	8.51	0.77
<b>Provides:</b> prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčík, PhD.					
<b>Date of last modification:</b> 24.07.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ PDSI2/21	<b>Course name:</b> Pro-seminar to diploma thesis in informatics
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for ongoing evaluation: <ol style="list-style-type: none"> <li>1. Analysis of the informatics curriculum of a selected country.</li> <li>2. Analysis of selected contributions of educational journals.</li> <li>3. Analysis of selected papers of conference proceedings.</li> <li>4. Analysis of a selected educational project.</li> </ol> Conditions for the final evaluation: <ol style="list-style-type: none"> <li>1. Creation of a thesis assignment (title, objectives, literature, supervisor).</li> <li>2. Creation of an overview of the current state of the studied issue.</li> <li>3. Creation and presentation of the thesis website.</li> </ol> Conditions for successful completion of the course: Fulfillment of all ongoing and final assignments.	
<b>Learning outcomes:</b> The student will get an idea of a thesis focused on the teaching of informatics (its types, structure and life cycle). The student actively exploit educational information resources (publication databases, journals and conference proceedings, educational projects). The student gains an overview of the content of informatics teaching at home and abroad, as well as the teaching of current topics in informatics. The student will create an overview of the current state of teaching issues related to the selected topic of the master thesis.	
<b>Brief outline of the course:</b> <ol style="list-style-type: none"> <li>1. Master theses focused on teaching informatics (types of theses, structure of thesis, life cycle of theses).</li> <li>2. Analysis of selected theses on teaching informatics (CRZP).</li> <li>3. Overview of information resources (curricula of informatics abroad, available publication databases, journals and conference proceedings, educational projects).</li> <li>4. Study and analysis of informatics curricula in selected countries (CSTA, UK, Czech Republic).</li> <li>5. Study and analysis of selected papers of educational journals (INFEDU, C&amp;E, JTIE, ICTE, MFI, OMFI, sciED).</li> </ol>	



6. Study and analysis of selected papers of educational journals (INFEDU, C&E, JTIE, ICTE, MFI, OMFI, sciED).
7. Study and analysis of selected papers of conference proceedings (DidInfo, ISSEP, EduLearn, MIPRO, ICETA).
8. Study and analysis of selected conference proceedings (DidInfo, ISSEP, EduLearn, MIPRO, ICETA).
9. Study and analysis of selected educational projects (NP ITA, ĎVUi, PRIM, eTwinning).
10. Study and analysis of selected educational projects (NP ITA, ĎVUi, PRIM, eTwinning).
11. Creation of a diploma website with an overview of the current state of the topic of the diploma thesis.
12. Creation of a diploma website with an overview of the current state of the topic of the diploma thesis.

#### **Recommended literature:**

MEŠKO, Dušan, Dušan KATUŠČÁK and Ján FINDRA, 2013. Akademická príručka: Chcete byť úspešní na vysokej škole? 3. vydanie. Osveta, 495 pp. ISBN 9788080633929.

KATUŠČÁK, Dušan, 2013. Ako písať záverečné a kvalifikačné práce. Enigma, 162 pp. ISBN 8089132454.

COMPUTER SCIENCE TEACHERS ASSOCIATION. Home Page

Computer Science Teachers Association [online]. [cited 2021-7-30]. Available from: <https://www.csteachers.org/>

ASSOCIATION FOR COMPUTING MACHINERY. The ACM Digital Library [online]. [cited 2021-7-30]. Available from: <https://dl.acm.org/>

SPRINGER NATURE SWITZERLAND AG. Home - Springer [online]. [cited 2021-7-30].

Available from: <https://link.springer.com/>

BAČÍKOVÁ, Mária, Anna JANOVSÁ and Oľga OROSOVÁ, 2019. Základy metodológie pedagogicko-psychologického výskumu: Sprievodca pre študentov učiteľstva [online]. 2. doplnené vydanie. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 195 pp. [cited 2021-7-29]. ISBN 978-80-8152-805-7. Available from: <https://unibook.upjs.sk/sk/filozoficka-fakulta/1266-zaklady-metodologie-pedagogicko-psychologickeho-vyskumu-sprievodca-pre-studentov-ucitelstva>

Informatics in Education. Vilnius University Institute of Data Science and Digital Technologies. ISSN 2335-8971 (online). Also available from: <https://infedu.vu.lt/journal/INFEDU>

Matematika–fyzika–informatika. Praha: PROMETHEUS. ISSN 1805-7705. Also available from: <http://www.mfi.upol.cz/index.php/mfi/index>

UNIVERZITA MATEJA BELA V BANSKEJ BYSTRICI, TECHNICKÁ UNIVERZITA V LIBERCI, 2021. Zborníky medzinárodnej konferencie DidInfo (od roku 2011) [online]. [cited 2021-7-30]. Available from: <http://www.didinfo.net/minule-rocniky>

CENTRUM VEDECKO-TECHNICKÝCH INFORMÁCIÍ SR. Centrálny register záverečných a kvalifikačných prác [online]. [cited 2021-7-30]. Available from: <https://cms.crzp.sk/>

#### **Course language:**

Slovak and partly English due to selected information sources

#### **Notes:**

By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.

<b>Course assessment</b>	
Total number of assessed students: 2	
abs	n
100.0	0.0
<b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD.	
<b>Date of last modification:</b> 01.08.2021	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPPaPZ/PASZ/17		<b>Course name:</b> Problem and Aggressive Behaviour of Pupils. Etiology, Prevention and Intervention.			
<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 ECTS credits:</b> 2					
<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> General principles of mental development as a basis for recognizing mental disorders in children and adolescents. Etiology of mental disorders and developmental disorders in children and adolescents. Definition of aggressive behavior. Concepts of aggression vs. aggressiveness. Theoretical approaches to aggression. Causes and factors of aggressive behavior. Violence at school and in the family. Bullying. Psychology of problem students. Problems resulting from disturbed behavior. Problems arising from group relationships. Adolescent lifestyle issues. Problems resulting from impaired emotional experience. Solving problematic and aggressive behavior in the school environment. School classroom management, group preventive and intervention work with the classroom. Crisis intervention. Work with parents of problem students. Principles of interviewing a parent. Cooperation with other experts. Prevention of aggressive and problematic behavior at school. Classroom and school climate, school prevention programs. Viac o tomto zdrojovom texteNa získanie ďalších informácií o preklade sa vyžaduje zdrojový text Odoslať spätnú väzbu Bočné panely					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 94					
A	B	C	D	E	FX
73.4	19.15	7.45	0.0	0.0	0.0
<b>Provides:</b> PhDr. Anna Janovská, PhD.					
<b>Date of last modification:</b> 24.06.2022					

**Approved:** prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajči, PhD., prof. RNDr. Lubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/KPE/ EPU/15	<b>Course name:</b> Professional Ethics for Teachers and School Counsellors
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2., 4.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> 1. Active participation in seminars (max. 1 absence) - 30p, 2. Preparation for the seminar - 40p, 3. Preparation (description and analysis) of the moral dilemma - 30p. By summing the points obtained during the semester, the student obtains the final evaluation according to the scale: A 87 - 100, B 77 - 86, C 69 - 76, D 61 - 68, E 56 - 60, FX 55 and less. Detailed information in the electronic board of the course in AIS2. The teaching of the subject will be realized by a combined method.	
<b>Learning outcomes:</b> The student will understand the principles of teacher ethics and the ethics of the educational counselor as one of the branch types of professional ethics. The student can theoretically reflect on the ethical and moral issues of the teaching profession and the function of the educational counselor (including the formulation of moral values, principles and standards of the teaching profession and the function of the educational counselor in the form of codes of ethics). He is able to analyze and solve practical moral problems in pedagogical practice, which supports the development of professional skills of students. The student is able to critically evaluate situations with a moral context thanks to the opportunity to discuss moral and ethical issues in an open way.	
<b>Brief outline of the course:</b> Moral emotions (theories of emotion, the center of emotions in the brain, types of emotions and their manifestations) Development of moral reasoning, cognitive approaches to moral reasoning and their comparison (Piaget, Kohlberg, Gilligan, Eisenberg, Selman, Lind), Moral behavior (from the point of view of learning theories) and moral (vs. social and emotional) intelligence in the work of a teacher Possibilities of examining moral behavior and judgment (socio-psychological research of conformity, obedience, aggression and psychodiagnostic approaches to the determination of moral judgment) Morality and professional ethics in general (ethical principles in helping professions) and codes of ethics Professional ethics of the teacher and educational counselor (terminology, concepts, main principles of teacher ethics) and teacher ethics codes	

Moral dilemmas and ways of solving them, MD of teaching practice  
Possibilities of influencing and stimulating moral judgment, use of moral dilemma in education  
Cheating and other unethical manifestations in the school environment, ethics and etiquette of final exams

**Recommended literature:**

Ráčzová, Babinčák, P. Základy psychológie morálky. Košice : Equilibria, 2009. - 130 s. ISBN 9788070977866 (brož.).  
Gluchmanová, M. K niektorým terminologickým otázkam učiteľskej etiky. Pedagogická orientace 2007, č. 2, s. 11–25. ISSN 1211-4669.  
Malankievičová, S. Profesijsná etika: FF PU. 2008.  
Miežgová J., Vargová, D. Etika. SPN Mladé letá 2007.  
Remišová A. Dejiny etického myslenia v Európe a USA. Bratislava, Kalligram 2008.  
Zelina, M. Teória výchovy alebo hľadanie dobra. Bratislava SPN 2010.  
Gluchmanová, M. Uplatnenie princípov a hodnôt etiky sociálnych dôsledkov v učiteľskej etike. Prešov: FF PU, 2009. 222 s. ISBN 978-80-555-0042-3  
Campbell, E. The Ethical Teacher. Berkshire (England): Open University Press, 2003. 178 s. ISBN 03-3521-219-0.

**Course language:**

slovak

**Notes:**

**Course assessment**

Total number of assessed students: 490

A	B	C	D	E	FX
96.94	2.65	0.41	0.0	0.0	0.0

**Provides:** Mgr. Lucia Barbierik, PhD.

**Date of last modification:** 24.06.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/JAC1/15	<b>Course name:</b> Programming language C
<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 ECTS credits:</b> 2	
<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> Practices attendance and activity. Home assignment Final project.	
<b>Learning outcomes:</b> The student will gain the ability to create source code files in the C programming language, which is the primary system programming language used in the creation of operating systems and system components, as well as firmware for embedded devices. The aim of the exercise is to guide students from the simple language constructs to a full understanding of working with pointers and their use in the management of static and dynamic memory.	
<b>Brief outline of the course:</b> 1. Short overview of language history, explanation of terms, code compilation, linking and program execution. 2. Variables and data types, unary, binary and ternary operations, operator precedence. 3. Cycles, conditions. Structures, unions and enumerators. 4. Functions. 5. Pointers - concept, implementation, pointer arithmetic. 6. Fields - principle, implementation. 7. Dynamic memory allocation. 8. N-dimensional fields and pointers. 9. Text strings. 10. Input and output, command line arguments, process return codes. 11. Dynamic fields and structures. 12. Basic operations with regular files. 13. Pointer to a function. 14. Compiling a program from source code using the "make" utility.	
<b>Recommended literature:</b> 1. KERNIGHAN, Brian W., Dennis M. RITCHIE. Programovací jazyk C. Brno: Computer Press, 2006. ISBN:802510897X. 2. PRATA, Stephen. C Primer Plus. 6th Edition. Addison-Wesley Professional, 2014. ISBN 9780321928429.	

3. SEACORD, Robert C. Effective C: An Introduction to Professional C Programming. San Francisco, United States: No Starch Press, 2020. ISBN 9781718501041.

**Course language:**

Slovak or English

**Notes:**

**Course assessment**

Total number of assessed students: 250

A	B	C	D	E	FX
37.2	18.8	15.2	15.2	9.6	4.0

**Provides:** RNDr. PhDr. Peter Písařík, Mgr. Patrik Pekarčík

**Date of last modification:** 08.10.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.



## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/PPgU/15	<b>Course name:</b> Psychology and Educational Psychology
<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 ECTS credits:</b> 5	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Combined method. Assessment Maximum 50 points during the semester (Three assignments). Exam entry criteria: Active participation in exercises and at least 35 points obtained during the semester. Continuous assessment (50%) and written examination (50%) / 10 questions. Final evaluation: A 94-100 B 93-87 C 86-80 D 79-73 E 72- 66 FX 65 -0 Electronic board of the course AIS2 - more information and news.	
<b>Learning outcomes:</b> Students will be able to show understanding of the human behaviour in educational situations. Students will be able to describe, explain and justify possible teachers' decisions by using psychological concepts, principles and theories. Students will be able to apply the psychological findings in the field of education. Students will be able to explain how adolescents learn and retain new information, to explain their behaviour in response to educational environment. Students will be able to explain the desired data-based modification of adolescents' behaviour to bring an all-round development of his personality and school performance, to explain the desired data-based modification of the behaviour of adolescents with educational problems, with disadvantages.	
<b>Brief outline of the course:</b> Introduction: The content of the course is based on current knowledge of psychological disciplines, especially pedagogical and school psychology.	

<p>Teaching is realized by a combination of lectures with engaging narrative interpretation and seminars using interactive, experiential methods, discussion and open communication with mutual respect, support of independence, activity and motivation of students.</p> <p>Syllabus: The subject and goals of psychology and educational psychology. Professional forms of help in school practice.</p> <p>Implementation of psychological concepts of personality into school practice (Classical and contemporary psychoanalytic theory, Individual psychology, Humanistic psychology, Concept of creative-humanistic education; Cognitivism and Theory of personal constructs). Social psychology of school and family. Learning and teaching. Health and disease; risk / protective factors with healthy related risk behavior. Psychology of students with behavioral and learning problems. Psychology of students with psychosocial, socio-cultural, health disadvantages. Psychological examination. Consulting process. Crisis intervention. Programs for prevention of risky behavior of schoolchildren.</p>																	
<p><b>Recommended literature:</b></p> <p>Mareš, J.: Pedagogická psychologie. Praha : Grada 2013.</p> <p>Mareš, J., &amp; ČÁP, J.: Psychologie pro učitele. Praha: Portál, 2001.</p> <p>Džuka, J.: Základy pedagogickej psychológie. Prešov: UK 2003.</p> <p>Orosová, O. a kol: Psychológia a pedagogická psychológia 1. Košice: UPJŠ, 2005.</p> <p>Orosová, O. a kol.: Základy prevencie užívania drog a problematického používania internetu v školskej praxi. Košice: UPJŠ 2012.</p> <p>Vágnerová, M.: Základy psychológie. Praha : Karolinum 2005.</p> <p>Vágnerová, M.: Vývojová psychológie. Praha : Karolinum 2005.</p> <p>Vágnerová, M.: Škoní podadenská psychologie pro pedagogy. Praha : Karolinum 2005. Výrost, J., Slaměník, I.: Sociální psychologie. Praha : Grada 2008.</p> <p>Výrost, J., Salměník, I.: Aplikovaná sociální psychologie I. Praha: Portál 1998.</p> <p>Fontana, D. : Psychologie ve školní praxi. Praha: Portál 1997.</p> <p>Zelina, M.: Stratégie a metody rozvoja osobnosti. Bratislava, Iris: 1996.</p> <p>Křivohlavý, J.: Pozitivní psychologie. Praha: Portál 2004.</p> <p>Křivohlavý, J.: Psychologie zdraví. Praha: Portál 2003.</p>																	
<p><b>Course language:</b></p> <p>slovak</p>																	
<p><b>Notes:</b></p>																	
<p><b>Course assessment</b></p> <p>Total number of assessed students: 1625</p> <table border="1"> <thead> <tr> <th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>FX</th></tr> </thead> <tbody> <tr> <td>11.2</td><td>19.88</td><td>23.75</td><td>22.22</td><td>20.43</td><td>2.52</td></tr> </tbody> </table>						A	B	C	D	E	FX	11.2	19.88	23.75	22.22	20.43	2.52
A	B	C	D	E	FX												
11.2	19.88	23.75	22.22	20.43	2.52												
<p><b>Provides:</b> prof. PhDr. Oľga Orosová, CSc., Mgr. Lucia Barbierik, PhD., PhDr. Anna Janovská, PhD.</p>																	
<p><b>Date of last modification:</b> 24.06.2022</p>																	
<p><b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.</p>																	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/PTPN/17	<b>Course name:</b> Psychology of Creativity and Working with Gifted Students in Teacher Practice
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> 1. active participation in lessons (max. 2 absences) - 30p, 2. own output at the seminar - 40p, 3. seminar work - 30p. By summing the points obtained during the semester, the student obtains the final evaluation according to the given scale: A 87 - 100, B 77 - 86, C 69 - 76, D 61 - 68, E 56 - 60, FX 55 and less. Detailed information in the electronic board of the course in AIS2. The teaching of the subject will be realized by a combined method.	
<b>Learning outcomes:</b> The student understands the basic factors and process of creativity. The student is able to explain the specifics of working with the gifted. He knows the methods of identifying talent and also can apply methods to support creativity and the development of talent in the implementation of creative creativity in education.	
<b>Brief outline of the course:</b> The concept of creativity. A brief history of the theory of creativity. Social, psychological and biological factors of creativity. Cognitive processes in creativity. Creativity and cognitive style. Development of creativity. Talent and giftedness. Methods of determining creativity and talent. Methods of developing creativity and talent. Creativity and talent development programs. Specifics of working with the gifted children.	
<b>Recommended literature:</b> DOČKAL, V. (2006): Inteligencia a tvorivosť, tvorivé nadanie od intelektovej schopnosti po štruktúru osobnosti. In: KUSÁ, D. a kol. EDS. (2006): Zjavná a skrytá tvorivosť. Bratislava: Slovak Academic Press HRÍBKOVÁ, L. (2009): Nadání a nadaní. Pedagogicko- psychologické přístupy, modely, výzkumy a jejich vztah ke školské praxi. Praha: Grada Publishing DACEY, J.S.- LENNON, K.H. (2000): Kreativita. Praha: Grada	

GROSS, M.U.M. (2009): Highly Gifted Young People: Development from Childhood to Adulthood. In: SHAVININA, L. (2009): International Handbook on Giftedness. Part one. Springer

KUSÁ, D. a kol. EDS. (2006): Zjavná a skrytá tvorivosť. Bratislava: Slovak Academic Press

KOLKOVÁ, S. (2000): Tvorivosť a jej rozvoj vo voľnočasových aktivitách detí (v školskom klube). Bratislava: Metodické centrum v Bratislave

LOKŠOVÁ, I., - LOKŠA, J.: (2003): Tvořivé vyučování. Praha: Grada

LAZNIBATOVÁ, J. (2004): Špecifika vývinu a vzdelávania nadaných detí. In: Psychológia a patopsychológia dieťaťa, roč.39, č. 2-3

LAZNIBATOVÁ, J. (2001): Nadané dieťa, jeho vývin, vzdelávanie a podporovanie. Bratislava: Iris

MESÁROŠOVÁ, M. (1998): Nadané deti. Poznávanie a rozvíjanie ich osobnosti. Prešov: Manacon

SZOBIOVÁ, E. (2004): Tvorivosť – Od záhady k poznaniu. Bratislava: Stimul - Centrum informatiky a vzdelávania FIF UK

National and international scientific journals

**Course language:**

slovak

**Notes:**

**Course assessment**

Total number of assessed students: 79

A	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

**Provides:** Mgr. Lucia Barbierik, PhD.

**Date of last modification:** 24.06.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KSSFaK/ ČGUAP/15	<b>Course name:</b> Reading Literacy in Educational Process
<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 ECTS credits:</b> 2	
<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>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 42	
abs	n
100.0	0.0
<b>Provides:</b> doc. PaedDr. Ivica Hajdučková, PhD.	
<b>Date of last modification:</b> 29.06.2022	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ PPU1a/15	<b>Course name:</b> Running practice
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for continuous evaluation: Active participation in the selected type of internship based on the instructions given by the internship supervisor. Conditions for the final evaluation: Evaluation of the student's approach to the internship and the work performed in the internship by the internship supervisor.	
<b>Learning outcomes:</b> Experiences with the implementation of a selected type of internship.	
<b>Brief outline of the course:</b> The exact content of the internship is specified by the internship supervisor. Students choose from a menu of topics presented by the course administrator. Typical topics of practice are: 1. assistance in the realization of exercises for younger students, providing feedback to students on submitted homeworks 2. assistance in the installation and maintenance of computer and network infrastructure at UPJŠ 3. realizations of courses for working with specific software 4. creation of overviews from freely available sources	
<b>Recommended literature:</b> The study or technical literature is determined individually depending on the focus of the internship by the internship supervisor.	
<b>Course language:</b> Slovak or English	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 203	
abs	n
97.54	2.46

<b>Provides:</b> Ing. Miron Kuzma, PhD.
<b>Date of last modification:</b> 23.11.2021
<b>Approved:</b> prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Lubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/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 ECTS 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> Conditions for ongoing evaluation: <ol style="list-style-type: none"> <li>1. Observations for 11 lessons of the subject of informatics.</li> <li>2. Independent leading 1 lesson from the subject of informatics.</li> <li>3. Participation in 6 analyzes from lessons.</li> <li>4. Participation in a reflexive colloquium with a didactician of informatics.</li> </ol> Conditions for the final evaluation: <ol style="list-style-type: none"> <li>1. Submission of 11 observation records.</li> <li>2. Submission of a project of preparation for a lesson.</li> <li>3. Submission of a list of observations and own lesson of the trainee.</li> <li>4. Submission of evaluation of pedagogical output of the trainee.</li> <li>5. Submission of a report on ongoing pedagogical practice.</li> </ol> Conditions for successful completion of the course: Fulfillment of all ongoing and final assignments.	
<b>Learning outcomes:</b> Students acquire knowledge by observing the practical application of teaching skills for teaching the subject of informatics and get to know the organization of school work. They also acquire their first experience with the practical implementation of a informatics lesson.	
<b>Brief outline of the course:</b> Students observe the process of teaching informatics at secondary and primary school and analysed 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 lessons are students observing/teaching, the third lesson is for analysis of the first two under the guidance of a teacher trainer.	
<b>Recommended literature:</b> KOSOVÁ, Beata, Alena TOMENGOVÁ et al., 2015. Profesijná praktická príprava budúcich učiteľov [online]. Banská Bystrica: Vydavateľstvo Belianum, Univerzita Mateja Bela, Banská Bystrica, 226 pp. [cited. 2021-7-28]. ISBN 978-80-557-0860-7. Available from: <a href="https://publikacie.umb.sk/publication/publicationFileDownload.php?ID=18667">https://publikacie.umb.sk/publication/publicationFileDownload.php?ID=18667</a>	



<p>OROSOVÁ, Renáta and Zuzana BOBEROVÁ, 2016. Pregraduálna príprava učiteľov: Organizácia pedagogickej praxe na UPJŠ [online]. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 142 pp. [cited 2021-7-28]. ISBN 978-80-8152-460-8. Available from: <a href="https://unibook.upjs.sk/sk/pedagogika/342-pregradualna-priprava-ucitelov-organizacia-pedagogickej-praxe-na-upjs">https://unibook.upjs.sk/sk/pedagogika/342-pregradualna-priprava-ucitelov-organizacia-pedagogickej-praxe-na-upjs</a></p> <p>BOBEROVÁ, Zuzana, 2017. Začínajúci učiteľ a školská legislatíva I. [online]. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 104 pp. [cited 2021-7-28]. ISBN 978-80-8152-490-5. Available from: <a href="https://unibook.upjs.sk/sk/pedagogika/398-zacinajuci-ucitel-a-skolska-legislativa-i">https://unibook.upjs.sk/sk/pedagogika/398-zacinajuci-ucitel-a-skolska-legislativa-i</a></p> <p>Current informatics textbooks for primary and secondary schools in Slovakia.</p>					
<p><b>Course language:</b> Slovak</p>					
<p><b>Notes:</b> By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.</p>					
<p><b>Course assessment</b> Total number of assessed students: 72</p> <table> <tr> <th>abs</th><th>n</th></tr> <tr> <td>100.0</td><td>0.0</td></tr> </table>		abs	n	100.0	0.0
abs	n				
100.0	0.0				
<p><b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD.</p>					
<p><b>Date of last modification:</b> 01.08.2021</p>					
<p><b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.</p>					

## 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 ECTS 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>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 540	
abs	n
99.63	0.37
<b>Provides:</b>	
<b>Date of last modification:</b> 16.12.2021	

**Approved:** prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajči, PhD., prof. RNDr. Lubomír Kováč, CSc.

## 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:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS 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> Didactic analysis after conducted experiments and observations. Semester Project Methodology of practical exercise on the chosen topic biology curriculum, presentation and demonstration of integrated experiment at the end of the semester.	
<b>Learning outcomes:</b> Teacher preparation, how to carry out biological school experiments and classroom 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. UŠÁKOVÁ, K. ČIPKOVÁ, E., NAGYOVÁ, S. GÁLOVÁ, T. 2012, Biológia pre gymnáziá 7: Praktické cvičenia a seminár I, Slovenské pedagogické nakladateľstvo - Mladé letá (Bratislava) 2. vyd. ISBN: 9788010023905 UŠÁKOVÁ, K. ČIPKOVÁ, E., NAGYOVÁ, S. GÁLOVÁ, T. 2012, Biológia pre gymnáziá 8: Praktické cvičenia a seminár II, Slovenské pedagogické nakladateľstvo - Mladé letá (Bratislava) ISBN9788010023912 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> Slovak	
<b>Notes:</b> x	

<b>Course assessment</b>					
Total number of assessed students: 96					
A	B	C	D	E	FX
66.67	16.67	13.54	2.08	0.0	1.04
<b>Provides:</b> PaedDr. Andrea Lešková, PhD.					
<b>Date of last modification:</b> 31.05.2021					
<b>Approved:</b> prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ ÚTVŠ/CM/13	<b>Course name:</b> Seaside Aerobic Exercise
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Completion: passed Condition for successful course completion: - active participation in line with the study rule of procedure and course guidelines - effective performance of all tasks- aerobics, water exercise, yoga, Pilates and others	
<b>Learning outcomes:</b> Content standard: The student demonstrates relevant knowledge and skills in the field, which content is defined in the course syllabus and recommended literature. Performance standard: Upon completion of the course students are able to meet the performance standard and: - perform basic aerobics steps and basics of health exercises, - conduct verbal and non-verbal communication with clients during exercise, - organise and manage the process of physical recreation in leisure time	
<b>Brief outline of the course:</b> Brief outline of the course: 1. Basic aerobics – low impact aerobics, high impact aerobics, basic steps and cuing 2. Basics of aqua fitness 3. Basics of Pilates 4. Health exercises 5. Bodyweight exercises 6. Swimming 7. Relaxing yoga exercises 8. Power yoga 9. Yoga relaxation 10. Final assessment Students can engage in different sport activities offered by the sea resort – swimming, rafting, volleyball, football, table tennis, tennis and other water sports in particular.	
<b>Recommended literature:</b> 1. BUZKOVÁ, K. 2006. Fitness jóga. Praha: Grada. 167 s.	

2. ČECHOVSKÁ, I., MILEROVÁ, H., NOVOTNÁ, V. Aqua-fitness. Praha: Grada. 136 s.
3. EVANS, M., HUDSON, J., TUCKER, P. 2001. Umění harmonie: meditace, jóga, tai-či, strečink. 192 s.
4. JARKOVSKÁ, H., JARKOVSKÁ, M. 2005. Posilování s vlastním tělem 417 krát jinak. Praha: Grada. 209 s.
5. KOVAŘÍKOVÁ, K. 2017. Aerobik a fitness. Karolium, 130 s.

**Course language:**

Slovak language

**Notes:**

**Course assessment**

Total number of assessed students: 54

abs	n
11.11	88.89

**Provides:** Mgr. Agata Dorota Horbacz, PhD.

**Date of last modification:** 29.03.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/DSU1a/15	<b>Course name:</b> Seminar to diploma theses in informatics XI
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚINF/PDSI1/15 or ÚINF/PDSI2/22	
<b>Conditions for course completion:</b> Conditions for ongoing evaluation: 1. Creation of a glossary of terms and a concept map for teaching a selected topic. 2. Creation of a collection of solved tasks for teaching the selected topic. 3. Creation of learning objectives and a graded system of tasks for teaching a selected topic. Conditions for the final evaluation: 1. Update and presentation of the thesis website. Conditions for successful completion of the course: Fulfillment of all ongoing and final assignments.	
<b>Learning outcomes:</b> The student will gain an overview of the issues of pedagogical research in the field of teaching informatics. The student continuously works on his / her thesis (analyzes the content of teaching a selected topic, creates a glossary of terms and a concept map, creates a collection of tasks and then a system of graded tasks) and presents the ongoing results of his / her thesis.	
<b>Brief outline of the course:</b> 1. Pedagogical research in the field of teaching informatics (analysis of selected scientific studies with discussion). 2. Pedagogical research in the field of teaching informatics (analysis of selected scientific studies with discussion). 3. Pedagogical research in the field of teaching informatics (design of own pedagogical action research). 4. Analysis of the content of teaching of the selected topic (creation of a glossary of terms and a concept map). 5. Analysis of the content of teaching of the selected topic (creation of a glossary of terms and a concept map). 6. Creation of a collection of solved problems for teaching the selected topic. 7. Creation of a collection of solved problems for teaching the selected topic. 8. Creation of a collection of solved problems for teaching the selected topic. 9. Creation of learning objectives and a graded system of tasks for teaching the selected topic.	



10. Creation of learning objectives and a graded system of tasks for teaching the selected topic.
11. Presentations of ongoing results of students' theses, updating of thesis websites.
12. Presentations of ongoing results of students' theses, updating of thesis websites.

#### **Recommended literature:**

MEŠKO, Dušan, Dušan KATUŠČÁK and Ján FINDRA, 2013. Akademická príručka: Chcete byť úspešní na vysokej škole? 3. vydanie. Osveta, 495 pp. ISBN 9788080633929.

KATUŠČÁK, Dušan, 2013. Ako písať záverečné a kvalifikačné práce. Enigma, 162 pp. ISBN 8089132454.

COMPUTER SCIENCE TEACHERS ASSOCIATION. Home Page

Computer Science Teachers Association [online]. [cited 2021-7-30]. Available from: <https://www.csteachers.org/>

ASSOCIATION FOR COMPUTING MACHINERY. The ACM Digital Library [online]. [cited 2021-7-30]. Available from: <https://dl.acm.org/>

SPRINGER NATURE SWITZERLAND AG. Home - Springer [online]. [cited 2021-7-30]. Available from: <https://link.springer.com/>

BAČÍKOVÁ, Mária, Anna JANOVSÁ and Oľga OROSOVÁ, 2019. Základy metodológie pedagogicko-psychologického výskumu: Sprievodca pre študentov učiteľstva [online]. 2. doplnené vydanie. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 195 pp. [cited 2021-7-29]. ISBN 978-80-8152-805-7. Available from: <https://unibook.upjs.sk/sk/filozoficka-fakulta/1266-zaklady-metodologie-pedagogicko-psychologickeho-vyskumu-sprievodca-pre-studentov-ucitelstva>

Informatics in Education. Vilnius University Institute of Data Science and Digital Technologies. ISSN 2335-8971 (online). Also available from: <https://infedu.vu.lt/journal/INFEDU>

Matematika–fyzika–informatika. Praha: PROMETHEUS. ISSN 1805-7705. Also available from: <http://www.mfi.upol.cz/index.php/mfi/index>

UNIVERZITA MATEJA BELA V BANSKEJ BYSTRICI, TECHNICKÁ UNIVERZITA V LIBERCI, 2021. Zborníky medzinárodnej konferencie DidInfo (od roku 2011) [online]. [cited 2021-7-30]. Available from: <http://www.didinfo.net/minule-rocniky>

CENTRUM VEDECKO-TECHNICKÝCH INFORMÁCIÍ SR. Centrálny register záverečných a kvalifikačných prác [online]. [cited 2021-7-30]. Available from: <https://cms.crzp.sk/>

#### **Course language:**

Slovak and partly English due to selected information sources

#### **Notes:**

By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.

#### **Course assessment**

Total number of assessed students: 12

abs	n
100.0	0.0

**Provides:** doc. RNDr. Ľubomír Šnajder, PhD.

**Date of last modification:** 01.08.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/DSU1b/15	<b>Course name:</b> Seminar to diploma theses in informatics XI
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚINF/DSU1a/15	
<b>Conditions for course completion:</b> Conditions for ongoing evaluation: 1. Creation of diagnostic tools for teaching selected topics. 2. Creation of teaching aids for teaching selected topics. 3. Creating preparation for teaching selected topics. 4. Evaluation of pilot teaching. Conditions for the final evaluation: 1. Update and presentation of the thesis website. Conditions for successful completion of the course: Fulfillment of all ongoing and final assignments.	
<b>Learning outcomes:</b> The student continuously works on his / her thesis (creates diagnostic tools, teaching aids, thematic plan, preparation for teaching, implements and evaluates pilot teaching) and presents the ongoing results of his /her thesis.	
<b>Brief outline of the course:</b> 1. Creation of diagnostic tools for teaching the selected topic (didactic test, evaluation section of the project). 2. Creation of diagnostic tools for teaching the selected topic (didactic test, evaluation section of the project). 3. Creation of teaching aids (reference materials, work files, tutorials, instructional videos). 4. Creation of teaching aids (reference materials, work files, tutorials, instructional videos). 5. Creation of teaching aids (reference materials, work files, tutorials, instructional videos). 6. Creating a thematic plan. Creation of preparations and implementation of pilot teaching. 7. Creation of preparations and implementation of pilot teaching. 8. Creation of preparations and implementation of pilot teaching. 9. Evaluation of pilot teaching (results of teaching, identified misconceptions of students, interesting student solutions, other observations from teaching). 10. Evaluation of pilot teaching (results of teaching, identified misconceptions of students, interesting student solutions, other observations from teaching). 11. Presentations of ongoing results of students' theses, updates of diploma websites.	

12. Presentations of ongoing results of students' theses, updates of diploma websites.					
<p><b>Recommended literature:</b>  MEŠKO, Dušan, Dušan KATUŠČÁK and Ján FINDRA, 2013. Akademická príručka: Chcete byť úspešní na vysokej škole? 3. vydanie. Osveta, 495 pp. ISBN 9788080633929.  KATUŠČÁK, Dušan, 2013. Ako písať záverečné a kvalifikačné práce. Enigma, 162 pp. ISBN 8089132454.  COMPUTER SCIENCE TEACHERS ASSOCIATION. Home Page  Computer Science Teachers Association [online]. [cited 2021-7-30]. Available from: <a href="https://www.csteachers.org/">https://www.csteachers.org/</a>  ASSOCIATION FOR COMPUTING MACHINERY. The ACM Digital Library [online]. [cited 2021-7-30]. Available from: <a href="https://dl.acm.org/">https://dl.acm.org/</a>  SPRINGER NATURE SWITZERLAND AG. Home - Springer [online]. [cited 2021-7-30]. Available from: <a href="https://link.springer.com/">https://link.springer.com/</a>  BAČÍKOVÁ, Mária, Anna JANOVSÁ and Oľga OROSOVÁ, 2019. Základy metodológie pedagogicko-psychologického výskumu: Sprievodca pre študentov učiteľstva [online]. 2. doplnené vydanie. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 195 pp. [cited 2021-7-29]. ISBN 978-80-8152-805-7. Available from: <a href="https://unibook.upjs.sk/sk/filozoficka-fakulta/1266-zaklady-metodologie-pedagogicko-psychologickeho-vyskumu-sprievodca-pre-studentov-ucitelstva">https://unibook.upjs.sk/sk/filozoficka-fakulta/1266-zaklady-metodologie-pedagogicko-psychologickeho-vyskumu-sprievodca-pre-studentov-ucitelstva</a>  Informatics in Education. Vilnius University Institute of Data Science and Digital Technologies. ISSN 2335-8971 (online). Also available from: <a href="https://infedu.vu.lt/journal/INFEDU">https://infedu.vu.lt/journal/INFEDU</a>  Matematika–fyzika–informatika. Praha: PROMETHEUS. ISSN 1805-7705. Also available from: <a href="http://www.mfi.upol.cz/index.php/mfi/index">http://www.mfi.upol.cz/index.php/mfi/index</a>  UNIVERZITA MATEJA BELA V BANSKEJ BYSTRICI, TECHNICKÁ UNIVERZITA V LIBERCI, 2021. Zborníky medzinárodnej konferencie DidInfo (od roku 2011) [online]. [cited 2021-7-30]. Available from: <a href="http://www.didinfo.net/minule-rocniky">http://www.didinfo.net/minule-rocniky</a>  CENTRUM VEDECKO-TECHNICKÝCH INFORMÁCIÍ SR. Centrálny register záverečných a kvalifikačných prác [online]. [cited 2021-7-30]. Available from: <a href="https://cms.crzp.sk/">https://cms.crzp.sk/</a></p>					
<p><b>Course language:</b>  Slovak and partly English due to selected information sources</p>					
<p><b>Notes:</b>  By default, teaching is carried out face to face. If this is not possible (eg due to a pandemic), teaching is provided at a distance through video conferencing programs and LMS.</p>					
<p><b>Course assessment</b>  Total number of assessed students: 31</p> <table border="1"> <thead> <tr> <th>abs</th><th>n</th></tr> </thead> <tbody> <tr> <td>100.0</td><td>0.0</td></tr> </tbody> </table>		abs	n	100.0	0.0
abs	n				
100.0	0.0				
<p><b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD.</p>					
<p><b>Date of last modification:</b> 01.08.2021</p>					
<p><b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.</p>					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KSSFaK/VSJU/15	<b>Course name:</b> Slovak Language for Teachers
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week: 2 Per study period: 28</b> <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1., 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for successful completion of the course: a) regular active participation in seminars, b) preparation of basic literature and content of lectures, c) elaboration of seminar work / creative task, d) successful completion of the final test. Conditions for obtaining the final evaluation: a) seminar work / creative task b) final test (min. 56%) Final evaluation: 100,00 - 92,00% A 91,99 - 83,00% B 82,99 - 74,00 % C 73.99 - 65.00% D 64.99 - 56.00% E 55.99% and less FX Prerequisites for successful completion of the course are annually updated on the electronic bulletin board in AIS2.	
<b>Learning outcomes:</b> During the final evaluation, the student demonstrates adequate mastery of the content standard of the course, which is defined by the required literature and seminar content, and demonstrates mastery of the performance standard, within which the student is able to practically apply the standard of standard Slovak in oral and written communications. manuals, gain skill in the bibliographic and citation standard. The graduate of the course normatively masters written communication on the basis of current orthographic rules and knows the basic characteristics of the means of expression of the text and functional language style.	
<b>Brief outline of the course:</b> Characteristics of basic terms of general linguistics (language – speech, language functions, the sign character of language, language levels, content and form in language, individual and general aspect of language units) on interdisciplinary background and with the application to Slovak as a national language. Language standard, codification, usus. Basic codification manuals. Application of orthographic rules in practical documents. Sound culture, pronunciation styles. Orthoepic phenomena in vowels and consonants. Application of rhythmic law and its exceptions. Assimilation and its specific features in Slovak. Style, stylization – methods and demonstration of structure of text components.	
<b>Recommended literature:</b> BÓNOVÁ, I. - JASINSKÁ, L.: Jazyková kultúra nielen pre lingvistov. Košice: UPJŠ 2019. 100 s.	

FINDRA, J.: Štylistika slovenčiny. Martin : Osveta, 2004.  
 FINDRA, J.: Štylistika slovenčiny v cvičeniach. Martin : Osveta, 2005.  
 KRÁĽ, Á.: Pravidlá slovenskej výslovnosti. Martin: Matica slovenská 2006. 423 s.  
 Krátky slovník slovenského jazyka. Martin: Matica slovenská 2020.  
 SABOL, J.- SLANČOVÁ, D. - SOKOLOVÁ, M.: Kultúra hovoreného slova. Prešov, FF UPJŠ 1989.  
 Pravidlá slovenského pravopisu. Bratislava: Veda 2000 (2013).  
 SABOL, J. – BÓNOVÁ, I. – SOKOLOVÁ, M.: Kultúra hovoreného prejavu. Prešov: FF PU 2006.  
 SLANČOVÁ, D.: Praktická štylistika. 2., upravené a doplnené vydanie. Prešov: Slovacontact 1996. 178 s. ISBN 80-901417-9-X.  
 Slovník súčasného slovenského jazyka. Bratislava: Veda 2006.  
 Slovník súčasného slovenského jazyka. Bratislava: Veda 2011.  
 Slovník súčasného slovenského jazyka. Bratislava: Veda 2015.

**Course language:**

Slovak language

**Notes:**

**Course assessment**

Total number of assessed students: 124

A	B	C	D	E	FX
16.94	25.0	33.87	13.71	9.68	0.81

**Provides:** PhDr. Iveta Bónová, PhD., PhDr. Lucia Jasinská, PhD.

**Date of last modification:** 24.06.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ TVa/11	<b>Course name:</b> Sports Activities I.
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> I., I.II., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Min. 80% of active participation in classes.	
<b>Learning outcomes:</b> Sports activities in all their forms prepare university students for their professional and personal life. They have a great impact on physical fitness and performance. Specialization in sports activities enables students to strengthen their relationship towards the selected sport in which they also improve.	
<b>Brief outline of the course:</b> Brief outline of the course: Within the optional subject, the Institute of Physical Education and Sports of Pavol Jozef Šafárik University provides for students the following sports activities: aerobics, aikido, basketball, badminton, body form, bouldering, floorball, yoga, power yoga, pilates, swimming, body-building, indoor football, S-M systems, step aerobics, table tennis, tennis, volleyball and chess. In the first two semesters of the first level of education students will master basic characteristics and particularities of individual sports, motor skills, game activities, they will improve level of their physical condition, coordination abilities, physical performance, and motor performance fitness. Last but not least, the important role of sports activities is to eliminate swimming illiteracy and by means of a special program of medical physical education to influence and mitigate unfitness. In addition to these sports, the Institute offers for those who are interested winter and summer physical education trainings with an attractive program and organises various competitions, either at the premises of the faculty or University or competitions with national or international participation.	
<b>Recommended literature:</b> BENCE, M. et al. 2005. Plávanie. Banská Bystrica: FHV UMB. 198s. ISBN 80-8083-140-8. [online] Dostupné na: <a href="https://www.ff.umb.sk/app/cmsFile.php?disposition=a&amp;ID=571">https://www.ff.umb.sk/app/cmsFile.php?disposition=a&amp;ID=571</a> BUZKOVÁ, K. 2006. Fitness jóga, harmonické cvičení těla I duše. Praha: Grada. ISBN 8024715252. JARKOVSKÁ, H, JARKOVSKÁ, M. 2005. Posilování s vlastním tělem 417 krát jinak. Praha: Grada. ISBN 9788024757308. KAČÁNI, L. 2002. Futbal:Tréning hrou. Bratislava: Peter Mačura – PEEM. 278s. ISBN 8089197027.	

KRESTA, J. 2009. Futsal. Praha: Grada Publishing, a.s. 112s. ISBN 9788024725345.  
 LAWRENCE, G. 2019. Power jóga nejen pro sportovce. Brno: CPress. ISBN 9788026427902.  
 SNER, Wolfgang. 2004. Posilování ve fitness. České Budějovice: Kopp. ISBN 8072322141.  
 STACKEOVÁ, D. 2014. Fitness programy z pohledu kinantropologie. Praha: Galén. ISBN 9788074921155.  
 VOMÁČKO, S. BOŠTÍKOVÁ, S. 2003. Lezení na umělých stěnách. Praha: Grada. 129s. ISBN 8024721743.

**Course language:**

Slovak language

**Notes:**

**Course assessment**

Total number of assessed students: 14548

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
86.46	0.07	0.0	0.0	0.0	0.05	8.41	5.02

**Provides:** Mgr. Agata Dorota Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., MPH, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Marcel Čurgali, Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD., Mgr. Richard Melichar, Mgr. Petra Tomková, PhD., MUDr. Peter Dombrovský

**Date of last modification:** 29.03.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ TVb/11	<b>Course name:</b> Sports Activities II.
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> I., I.II., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> active participation in classes - min. 80%.	
<b>Learning outcomes:</b> Sports activities in all their forms prepare university students for their professional and personal life. They have a great impact on physical fitness and performance. Specialization in sports activities enables students to strengthen their relationship towards the selected sport in which they also improve.	
<b>Brief outline of the course:</b> Within the optional subject, the Institute of Physical Education and Sports of Pavol Jozef Šafárik University provides for students the following sports activities: aerobics, aikido, basketball, badminton, body form, bouldering, floorball, yoga, power yoga, pilates, swimming, body-building, indoor football, S-M systems, step aerobics, table tennis, tennis, volleyball and chess. In the first two semesters of the first level of education students will master basic characteristics and particularities of individual sports, motor skills, game activities, they will improve level of their physical condition, coordination abilities, physical performance, and motor performance fitness. Last but not least, the important role of sports activities is to eliminate swimming illiteracy and by means of a special program of medical physical education to influence and mitigate unfitness. In addition to these sports, the Institute offers for those who are interested winter and summer physical education trainings with an attractive program and organises various competitions, either at the premises of the faculty or University or competitions with national or international participation.	
<b>Recommended literature:</b> BENCE, M. et al. 2005. Plávanie. Banská Bystrica: FHV UMB. 198s. ISBN 80-8083-140-8. [online] Dostupné na: <a href="https://www.ff.umb.sk/app/cmsFile.php?disposition=a&amp;ID=571">https://www.ff.umb.sk/app/cmsFile.php?disposition=a&amp;ID=571</a> BUZKOVÁ, K. 2006. Fitness jóga, harmonické cvičení těla I duše. Praha: Grada. ISBN 8024715252. JARKOVSKÁ, H, JARKOVSKÁ, M. 2005. Posilování s vlastním tělem 417 krát jinak. Praha: Grada. ISBN 9788024757308. KAČÁNI, L. 2002. Futbal:Tréning hrou. Bratislava: Peter Mačura – PEEM. 278s. ISBN 8089197027. KRESTA, J. 2009. Futsal.Praha: Grada Publishing, a.s. 112s. ISBN 9788024725345.	



LAWRENCE, G. 2019. Power jóga nejen pro sportovce. Brno: CPress. ISBN 9788026427902.  
 SNER, Wolfgang. 2004. Posilování ve fitness. České Budějovice: Kopp. ISBN 8072322141.  
 STACKEOVÁ, D. 2014. Fitness programy z pohledu kinantropologie. Praha: Galén. ISBN 9788074921155.  
 VOMÁČKO, S. BOŠTÍKOVÁ, S. 2003. Lezení na umělých stěnách. Praha: Grada. 129s. ISBN 8024721743.

**Course language:**

Slovak language

**Notes:**

**Course assessment**

Total number of assessed students: 13211

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
84.35	0.51	0.02	0.0	0.0	0.05	10.78	4.29

**Provides:** Mgr. Agata Dorota Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., MPH, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Marcel Čurgali, Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD., Mgr. Richard Melichar, Mgr. Petra Tomková, PhD., MUDr. Peter Dombrovský

**Date of last modification:** 29.03.2022

**Approved:** prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ TVc/11	<b>Course name:</b> Sports Activities III.
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> I., I.II., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> min. 80% of active participation in classes	
<b>Learning outcomes:</b> Sports activities in all their forms prepare university students for their professional and personal life. They have a great impact on physical fitness and performance. Specialization in sports activities enables students to strengthen their relationship towards the selected sport in which they also improve.	
<b>Brief outline of the course:</b> Within the optional subject, the Institute of Physical Education and Sports of Pavol Jozef Šafárik University provides for students the following sports activities: aerobics, aikido, basketball, badminton, body form, bouldering, floorball, yoga, power yoga, pilates, swimming, body-building, indoor football, S-M systems, step aerobics, table tennis, tennis, volleyball and chess. In the first two semesters of the first level of education students will master basic characteristics and particularities of individual sports, motor skills, game activities, they will improve level of their physical condition, coordination abilities, physical performance, and motor performance fitness. Last but not least, the important role of sports activities is to eliminate swimming illiteracy and by means of a special program of medical physical education to influence and mitigate unfitness. In addition to these sports, the Institute offers for those who are interested winter and summer physical education trainings with an attractive program and organises various competitions, either at the premises of the faculty or University or competitions with national or international participation.	
<b>Recommended literature:</b> BENCE, M. et al. 2005. Plávanie. Banská Bystrica: FHV UMB. 198s. ISBN 80-8083-140-8. [online] Dostupné na: <a href="https://www.ff.umb.sk/app/cmsFile.php?disposition=a&amp;ID=571">https://www.ff.umb.sk/app/cmsFile.php?disposition=a&amp;ID=571</a> BUZKOVÁ, K. 2006. Fitness jóga, harmonické cvičení těla I duše. Praha: Grada. ISBN 8024715252. JARKOVSKÁ, H, JARKOVSKÁ, M. 2005. Posilování s vlastním tělem 417 krát jinak. Praha: Grada. ISBN 9788024757308. KAČÁNI, L. 2002. Futbal:Tréning hrou. Bratislava: Peter Mačura – PEEM. 278s. ISBN 8089197027. KRESTA, J. 2009. Futsal.Praha: Grada Publishing, a.s. 112s. ISBN 9788024725345.	

LAWRENCE, G. 2019. Power jóga nejen pro sportovce. Brno: CPress. ISBN 9788026427902.  
 SNER, Wolfgang. 2004. Posilování ve fitness. České Budějovice: Kopp. ISBN 8072322141.  
 STACKEOVÁ, D. 2014. Fitness programy z pohledu kinantropologie. Praha: Galén. ISBN 9788074921155.  
 VOMÁČKO, S. BOŠTÍKOVÁ, S. 2003. Lezení na umělých stěnách. Praha: Grada. 129s. ISBN 8024721743.

**Course language:**

Slovak language

**Notes:**

**Course assessment**

Total number of assessed students: 8879

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
88.62	0.07	0.01	0.0	0.0	0.02	4.25	7.03

**Provides:** Mgr. Marcel Čurgali, Mgr. Agata Dorota Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., MPH, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD., Mgr. Richard Melichar, Mgr. Petra Tomková, PhD., MUDr. Peter Dombrovský

**Date of last modification:** 29.03.2022

**Approved:** prof. PhDr. Olga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ TVd/11	<b>Course name:</b> Sports Activities IV.
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> I., I.II., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> min. 80% of active participation in classes	
<b>Learning outcomes:</b> Sports activities in all their forms prepare university students for their professional and personal life. They have a great impact on physical fitness and performance. Specialization in sports activities enables students to strengthen their relationship towards the selected sport in which they also improve.	
<b>Brief outline of the course:</b> Within the optional subject, the Institute of Physical Education and Sports of Pavol Jozef Šafárik University provides for students the following sports activities: aerobics, aikido, basketball, badminton, body form, bouldering, floorball, yoga, power yoga, pilates, swimming, body-building, indoor football, S-M systems, step aerobics, table tennis, tennis, volleyball and chess. In the first two semesters of the first level of education students will master basic characteristics and particularities of individual sports, motor skills, game activities, they will improve level of their physical condition, coordination abilities, physical performance, and motor performance fitness. Last but not least, the important role of sports activities is to eliminate swimming illiteracy and by means of a special program of medical physical education to influence and mitigate unfitness. In addition to these sports, the Institute offers for those who are interested winter and summer physical education trainings with an attractive program and organises various competitions, either at the premises of the faculty or University or competitions with national or international participation.	
<b>Recommended literature:</b> BENCE, M. et al. 2005. Plávanie. Banská Bystrica: FHV UMB. 198s. ISBN 80-8083-140-8. [online] Dostupné na: <a href="https://www.ff.umb.sk/app/cmsFile.php?disposition=a&amp;ID=571">https://www.ff.umb.sk/app/cmsFile.php?disposition=a&amp;ID=571</a> BUZKOVÁ, K. 2006. Fitness jóga, harmonické cvičení těla I duše. Praha: Grada. ISBN 8024715252. JARKOVSKÁ, H, JARKOVSKÁ, M. 2005. Posilování s vlastním tělem 417 krát jinak. Praha: Grada. ISBN 9788024757308. KAČÁNI, L. 2002. Futbal:Trénink hrou. Bratislava: Peter Mačura – PEEM. 278s. ISBN 8089197027. KRESTA, J. 2009. Futsal.Praha: Grada Publishing, a.s. 112s. ISBN 9788024725345.	

LAWRENCE, G. 2019. Power jóga nejen pro sportovce. Brno: CPress. ISBN 9788026427902.  
 SNER, Wolfgang. 2004. Posilování ve fitness. České Budějovice: Kopp. ISBN 8072322141.  
 STACKEOVÁ, D. 2014. Fitness programy z pohledu kinantropologie. Praha: Galén. ISBN 9788074921155.  
 VOMÁČKO, S. BOŠTÍKOVÁ, S. 2003. Lezení na umělých stěnách. Praha: Grada. 129s. ISBN 8024721743.

**Course language:**

Slovak language

**Notes:**

**Course assessment**

Total number of assessed students: 5628

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
82.66	0.28	0.04	0.0	0.0	0.0	8.05	8.97

**Provides:** Mgr. Marcel Čurgali, Mgr. Agata Dorota Horbacz, PhD., Mgr. Dávid Kaško, PhD., Mgr. Zuzana Küchelová, PhD., doc. PaedDr. Ivan Uher, PhD., MPH, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Patrik Berta, Mgr. Ladislav Kručanica, PhD., Mgr. Richard Melichar, Mgr. Petra Tomková, PhD., MUDr. Peter Dombrovský

**Date of last modification:** 29.03.2022

**Approved:** prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ SVK1/15	<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 ECTS credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 2., 4.	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> It is required to be registered for the participation on the Student Scientific Conference (ŠVK) in accordance to the Statute of the Student Scientific Conference at PF UPJŠ and the specific conditions for participation in a given year, which are announced by the dean of the faculty. Within one year of the ŠVK, a student or a research team can register in one track only. It is also possible to apply with a written work that is an integral part of a bachelor's or master's thesis or a result of a student support program. The written work at ŠVK is the result of the student's own work or the work of the research team. It must not show elements of academic fraud and must meet the criteria of good research practice defined in the Rector's Decision no. 21/2021, which lays down the rules for assessing plagiarism at Pavol Jozef Šafárik University in Košice and its components. Fulfillment of the criteria is verified mainly in the process of supervision and in the process of work presentation. Failure to do so is reason for disciplinary action. The condition for the evaluation is a successful presentation and defense of the work in the relevant track headed by a commission appointed by the dean of the faculty. The commission decides on the eligibility of credits and states its decision in the memorandum of the ŠVK.	
<b>Learning outcomes:</b> The student demonstrates mastery of extended theory and professional terminology of the field of study, acquisition of knowledge, skills and competences, the ability to apply them creatively in solving selected field problems, ability to present the results using appropriate presentation methods and tools and ability to actively participate in a professional discussion.	
<b>Brief outline of the course:</b> <ol style="list-style-type: none"> <li>1. Analysis of the state of the art in the field.</li> <li>2. Design and implementation of a solution to the researched problem.</li> <li>3. Evaluation of achieved results.</li> <li>4. Preparation of work annotation.</li> <li>5. Processing the written work.</li> <li>6. Preparation of results presentation.</li> <li>7. Presentation and defense of the obtained results.</li> </ol>	
<b>Recommended literature:</b>	

The recommended literature is specified individually by the student or research team in agreement with the consultant or the supervisor.	
<b>Course language:</b> Slovak or english	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 24	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 25.01.2022	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ LKSp/13	<b>Course name:</b> Summer Course-Rafting of TISA River
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Completion: passed Condition for successful course completion: - active participation in line with the study rule of procedure and course guidelines - effective performance of all tasks: carrying a canoe, entering and exiting a canoe, righting a canoe, paddling	
<b>Learning outcomes:</b> Content standard: The student demonstrates relevant knowledge and skills in the field, which content is defined in the course syllabus and recommended literature. Performance standard: Upon completion of the course students are able to meet the performance standard and: - implement the acquired knowledge in different situations and practice, - implement basic skills to manipulate a canoe on a waterway, - determine the right spot for camping, - prepare a suitable material and equipment for camping.	
<b>Brief outline of the course:</b> Brief outline of the course: 1. Assessment of difficulty of waterways 2. Safety rules for rafting 3. Setting up a crew 4. Practical skills training using an empty canoe 5. Canoe lifting and carrying 6. Putting the canoe in the water without a shore contact 7. Getting in the canoe 8. Exiting the canoe 9. Taking the canoe out of the water 10. Steering a) The pry stroke (on fast waterways) b) The draw stroke	



11. Capsizing 12. Commands	
<b>Recommended literature:</b> 1. JUNGER, J. et al. Turistika a športy v prírode. Prešov: FHPV PU v Prešove. 2002. ISBN 8080680973. Internetové zdroje: 1. STEJSKAL, T. Vodná turistika. Prešov: PU v Prešove. 1999. Dostupné na: <a href="https://ulozto.sk/tamhle/UkyxQ2lYF8qh/name/Nahrane-7-5-2021-v-14-46-39#!ZGDjBGR2AQtkAzVkAzLkLJWuLwWxZ2ukBRLjnGqSomICMmOyZN==">https://ulozto.sk/tamhle/UkyxQ2lYF8qh/name/Nahrane-7-5-2021-v-14-46-39#!ZGDjBGR2AQtkAzVkAzLkLJWuLwWxZ2ukBRLjnGqSomICMmOyZN==</a>	
<b>Course language:</b> Slovak language	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 209	
abs	n
37.32	62.68
<b>Provides:</b> Mgr. Dávid Kaško, PhD.	
<b>Date of last modification:</b> 29.03.2022	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPE/MPPa/15	<b>Course name:</b> Supervised Teaching Practice
<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 ECTS credits:</b> 2	
<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>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 689	
abs	n
100.0	0.0
<b>Provides:</b> doc. PhDr. Beata Gajdošová, PhD., doc. PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petříková, PhD.	
<b>Date of last modification:</b> 20.06.2022	
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> KPE/ PDU/15		<b>Course name:</b> Teaching Methodology and Pedagogy			
<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 ECTS credits:</b> 5					
<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>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 746					
A	B	C	D	E	FX
24.66	28.15	27.35	13.94	5.36	0.54
<b>Provides:</b> doc. PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petriková, PhD.					
<b>Date of last modification:</b> 20.06.2022					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPPaPZ/UPR/15	<b>Course name:</b> The Art of Aiding by Verbal Exchange
<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 ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> 1. Active participation in seminars 2. Elaboration and presentation of PPT presentation on the assigned topic. Maximum number of points 20; minimum number of points 11. 3. Final test in the range of 20 questions from selected chapters and lectures. Maximum number of points 20; minimum number of points 11. The final evaluation (mark) is the sum of points for the presentation and the test. A 40b - 37b B 36b - 33b C 32b - 29b D 28b - 25b E 24b - 21b FX 20b - 0b The evaluation of the course and its subsequent completion will be based on clearly and objectively set requirements, which will be set in advance and will not change. The aim of the assessment is to ensure an objective and fair mapping of the student's knowledge while adhering to all ethical and moral standards. There is no tolerance for students' fraudulent behavior, whether in the teaching process or in the assessment process.	
<b>Learning outcomes:</b> Provide students with basic information about a systemic approach to helping. Train interviewing, clarify orders. Reflect on help options. The student is able to demonstrate an understanding of the theoretical principles of conducting a helping conversation. The student is able to describe, explain and evaluate in what context to use which of the selected techniques to help the interview with the individual. The student is able to use basic selected techniques when working with an individual in the interview process. The method of teaching the subject will be oriented to the student. Lecturers will be interested in students' needs, expectations and opinions so as to encourage them to think critically by expressing respect and feedback on their opinions and needs. The content of the curriculum will be based on primary and high-quality sources that will reflect the topicality of the topics so as to ensure the connection of the curriculum with other subjects and also the connection of the curriculum with practice. Students will be expected to take an active approach in lectures and seminars with an emphasis on their independence and responsibility.	
<b>Brief outline of the course:</b>	

Psychological preparation for conducting an interview. Self-reflection of one's own possibilities, abilities to lead a conversation, to help. Possibilities of helping with conversations from the point of view of selected psychological approaches. Systematic approach to helping. Interview and professional ways to help and control. Objectivist and constructivist framework of conversation in theory and practice. Is it possible to help with control? Opening the interview, negotiating the course, course, ending the interview. Constructivist questions in the interview. Analysis of individual phases of conducting the interview. Reflex team possibilities of help in conversation. Models of reflective teams. Model situations of conducting an interview with an individual. Model situations of conducting an interview with a group. Professional possibilities, advantages and pitfalls of solving problems with an individual, with a group.					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 149					
A	B	C	D	E	FX
89.26	2.68	6.04	1.34	0.67	0.0
<b>Provides:</b> Mgr. Ondrej Kalina, PhD.					
<b>Date of last modification:</b> 24.06.2022					
<b>Approved:</b> prof. PhDr. Ol'ga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Lubomír Kováč, CSc.					

## 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 ECTS 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 a selected topic. Completion of two semestral written examinations. 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>Notes:</b>	

<b>Course assessment</b>					
Total number of assessed students: 989					
A	B	C	D	E	FX
24.47	23.56	23.56	18.91	7.79	1.72
<b>Provides:</b> prof. RNDr. Ľubomír Kováč, CSc.					
<b>Date of last modification:</b> 10.12.2021					
<b>Approved:</b> prof. PhDr. Oľga Orosová, CSc., prof. RNDr. Stanislav Krajčí, PhD., prof. RNDr. Ľubomír Kováč, CSc.					