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2. Aktivizujúce metódy výučby chémie.	
3. Application of ICT into mathematics teaching.	
4. Child and Adolescent Sociology	
5. Class Management	
6. Didactics of geography	
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8. Didactics of geography 2	
9. Didactics of mathematics	
10. Didactics of mathematics I.	
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37. Pedagogická prax	
38. Pedagogy and Psychology	
39. Praktikum školských pokusov	
40. Professional Ethics for Teachers and School Counsellors	
41. Psychology and Educational Psychology	
42. Regionálna geografia I	
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University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Aktivizujúce metódy výučby biológie dAMVB/20 Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 12s Course method: present Number of ECTS credits: 2 **Recommended semester/trimester of the course:** 3. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 3 \mathbf{C} A В D Е FX 100.0 0.0 0.0 0.0 0.0 0.0 Provides: PaedDr. Andrea Lešková, PhD., Mgr. Zuzana Boberová, PhD. Date of last modification: Approved:

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Aktivizujúce metódy výučby chémie dAMCU/23 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 6s Course method: present **Number of ECTS credits: 2 Recommended semester/trimester of the course:** 3. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 3 \mathbf{C} A В D Е FX 100.0 0.0 0.0 0.0 0.0 0.0 Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Ivana Sotáková, Ph.D. Date of last modification: Approved:

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚMV/ Course name: Application of ICT into mathematics teaching dAIM/24 Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 1 Per study period: 14 Course method: present **Number of ECTS credits: 1 Recommended semester/trimester of the course:** 3. Course level: N Prerequisities: ÚMV/dDDMa/24 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 6 C Α В D Е FX 50.0 33.33 16.67 0.0 0.0 0.0 Provides: doc. RNDr. Stanislav Lukáč, PhD. Date of last modification: 29.02.2024 Approved:

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPO/ Course name: Child and Adolescent Sociology SDaMdps/15 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 6s Course method: present **Number of ECTS credits: 1 Recommended semester/trimester of the course:** 1. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 157 C Α В D Е FX 46.5 22.93 18.47 7.01 3.82 1.27 Provides: doc. Mgr. Alexander Onufrák, PhD. Date of last modification: 29.08.2024 Approved:

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Class Management MTdps/19 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 6s Course method: present **Number of ECTS credits: 1 Recommended semester/trimester of the course:** 2. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 57 C Α В D Е FX 35.09 40.35 17.54 7.02 0.0 0.0 Provides: doc. PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Vagaská, PhD. Date of last modification: 12.03.2024 Approved:

University: P. J. Šafárik University in Košice								
Faculty: Facult	Faculty: Faculty of Science							
Course ID: ÚG SPDdps/20	Course ID: ÚGE/ SPDdps/20 Course name: Didactics of geography							
Course type: Recommended Per week: Per Course metho								
Number of EC								
Recommended	semester/trimes	ster of the cours	e:					
Course level: N	[
Prerequisities:								
Conditions for	course completi	on:						
Learning outco	omes:							
Brief outline of	the course:							
Recommended	literature:							
Course languag	ge:							
Notes:								
	Course assessment Total number of assessed students: 0							
A	В	С	D	Е	FX			
0.0	0.0 0.0 0.0 0.0 0.0							
Provides:								
Date of last mo	Date of last modification:							
Approved:								

University: P. J.	Šafárik Univers	sity in Košice					
Faculty: Faculty	of Science						
Course ID: ÚGE/ dDIG1/20 Course name: Didactics of geography 1							
Per week: 12 I Course metho	ecture I course-load (h Per study period d: present	ours):					
Number of EC							
	semester/trimes	ster of the cours	e: 2.				
Course level: N							
Prerequisities:							
Conditions for	course completi	on:					
Learning outco	mes:						
Brief outline of	the course:						
Recommended	literature:						
Course languag	ge:						
Notes:							
Course assessm Total number of	ent assessed studen	its: 0					
A	В	С	D	Е	FX		
0.0	0.0	0.0	0.0	0.0	0.0		
Provides: RND	: Stela Csachová	á, PhD.		•	•		
Date of last mo	dification:						
Approved:				=			

University: P. J. S	Safárik Univers	ity in Košice					
Faculty: Faculty	of Science						
Course ID: ÚGE/ dDIG2/20 Course name: Didactics of geography 2							
Course type, scop Course type: Pro Recommended of Per week: Per se Course methods	actice course-load (he study period: 1 present	ours):					
Number of ECTS							
Recommended so	emester/trimes	ter of the cours	e: 3.				
Course level: N							
Prerequisities:							
Conditions for co	ourse completion	on:					
Learning outcom	ies:						
Brief outline of t	he course:						
Recommended li	terature:						
Course language	:						
Notes:							
Course assessme Total number of a		ts: 0					
A	В	С	D	Е	FX		
0.0	0.0	0.0	0.0	0.0	0.0		
Provides: RNDr.	Stela Csachová	, PhD.		,			
Date of last modi	fication:						
Approved:				-			

Page: 10

University: P. J	. Šafárik Univers	sity in Košice						
Faculty: Facult	y of Science							
Course ID: ÚMV/ Course name: Didactics of mathematics dDMT/24								
Course type: Recommende	cope and the med d course-load (h r study period: od: present							
Number of EC	TS credits: 1							
Recommended	semester/trimes	ster of the cours	e:					
Course level: N	Ī							
Prerequisities:								
Conditions for	course completi	on:						
Learning outco	omes:							
Brief outline of	f the course:							
Recommended	literature:							
Course langua	ge:							
Notes:				_				
Course assessn Total number o	nent f assessed studen	its: 0						
A	В	С	D	Е	FX			
0.0	0.0 0.0 0.0 0.0 0.0							
Provides:				<u> </u>				
Date of last mo	dification:							
Approved:				-				

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚMV/ Course name: Didactics of mathematics I dDDMa/24 Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present **Number of ECTS credits: 4 Recommended semester/trimester of the course:** 2. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 6 \mathbf{C} Α В D Е FX 66.67 33.33 0.0 0.0 0.0 0.0 Provides: doc. RNDr. Ingrid Semanišinová, PhD., RNDr. Veronika Hubeňáková, PhD. Date of last modification: 29.02.2024 Approved:

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚMV/ Course name: Didactics of mathematics II dDDMb/24 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present **Number of ECTS credits: 3** Recommended semester/trimester of the course: 3. Course level: N Prerequisities: ÚMV/dDDMa/24 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 6 C Α В D Е FX 16.67 50.0 16.67 16.67 0.0 0.0 Provides: doc. RNDr. Ingrid Semanišinová, PhD., RNDr. Veronika Hubeňáková, PhD. Date of last modification: 29.02.2024 Approved:

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University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ | Course name: Didactics of programming

dDPRG/21

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: Per study period: 12s

Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 3.

Course level: N

Prerequisities:

Conditions for course completion:

Conditions for ongoing evaluation:

- 1. Creation of an assignment and an commented author's solution of of a selected algorithmic problem.
- 2. Creation of an assignment and an commented author's solution of the STEAM task using several problem solving strategies.
- 3. Proposal of a pair of maturita assignments with solutions and methodological comments.
- 4. Creation of educational objectives and a collection of solved and commented tasks for a selected topic of programming in Python.

Conditions for successful completion of the course:

Obtaining at least 50% of points for ongoing assignments.

Learning outcomes:

The student can define specific learning objectives for a selected topic of teaching programming; create assignments and sample solutions to STEAM problems using different problem-solving strategies; analyze and evaluate student problem solutions and identify their misconceptions; design a methodology for teaching a selected topic in programming.

Brief outline of the course:

- 1. Educational standards in programming in secondary and primary schools. Graduation in informatics.
- 2. Programming competitions.
- 3. Algorithmic thinking. Algorithmic games.
- 4. Computational thinking. Problem solving strategies.
- 5. Data structures around us, algorithms over data structures.
- 6. Teaching selected algorithms and problem solving strategies (recursion).
- 7. Basic concepts and misconceptions of programming.
- 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

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-preprog-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: 143

A	В	С	D	Е	FX
14.69	32.17	22.38	14.69	12.59	3.5

Provides: doc. RNDr. L'ubomír Šnajder, PhD.

Date of last modification: 04.08.2021

Approved:

University: P. J.	Šafárik Univers	ity in Košice			
Faculty: Faculty	of Science				
Course ID: ÚBE SPDdps/20	EV/ Course na	me: Didaktika b	iológie		
Course type, sco	pe and the met	hod:			
Course type: Recommended Per week: Per Course method	study period:	ours):			
Number of ECT	S credits: 1				
Recommended s	semester/trimes	ster of the cours	e:		
Course level: N				-	
Prerequisities:					
Conditions for c	ourse completi	on:			
Learning outcor	nes:				
Brief outline of	the course:				
Recommended l	literature:			_	
Course language	e:				
Notes:					
Course assessme Total number of		ts: 2			
A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides:					
Date of last mod	lification: 17.07	7.2023			
Approved:	,				
		"			

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Didaktika biológie 1 dDIB1/20 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: 12 Per study period: 168 Course method: present **Number of ECTS credits: 2 Recommended semester/trimester of the course:** 2. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 3 C A В D Е FX 66.67 33.33 0.0 0.0 0.0 0.0 Provides: PaedDr. Andrea Lešková, PhD. Date of last modification: 28.04.2023 Approved:

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University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Didaktika biológie 2 dDIB2/20 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 12s Course method: present **Number of ECTS credits: 2** Recommended semester/trimester of the course: 4. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 2 \mathbf{C} Α В D Ε FX 50.0 50.0 0.0 0.0 0.0 0.0 Provides: PaedDr. Andrea Lešková, PhD. Date of last modification: 28.04.2023 Approved:

Page: 18

Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Didaktika chémie SPDdps/20 Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period:	
SPDdps/20 Course type, scope and the method: Course type: Recommended course-load (hours):	
Course type: Recommended course-load (hours):	
Course method: present	
Number of ECTS credits: 1	
Recommended semester/trimester of the course:	
Course level: N	
Prerequisities:	
Conditions for course completion:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 7	
A B C D E FX	
100.0 0.0 0.0 0.0 0.0	
Provides:	
Date of last modification:	
Approved:	

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚCHV/ Course name: Didaktika chémie 1 dDCH1/20							
Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 12s Course method: present							
Number of ECTS credits: 2							
Recommended semester/trimester of the course: 2.							
Course level: N							
Prerequisities:							
Conditions for course completion:							
Learning outcomes:							
Brief outline of the course:							
Recommended literature:							
Course language:							
Notes:							
Course assessment Total number of assessed students: 6							
A B C D E FX							
83.33 0.0 0.0 16.67 0.0 0.0							
Provides: doc. RNDr. Mária Ganajová, CSc.							
Date of last modification:							
Approved:							

University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science							
Course ID: ÚCHV/ Course name: Didaktika chémie 2 dDCH2/20							
Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 12s Course method: present							
Number of ECTS credits: 2							
Recommended semester/trimester of the course: 3.							
Course level: N							
Prerequisities:							
Conditions for course completion:							
Learning outcomes:							
Brief outline of the course:							
Recommended literature:							
Course language:							
Notes:							
Course assessment Total number of assessed students: 10							
A B C D E	FX						
100.0 0.0 0.0 0.0	0.0						
Provides: doc. RNDr. Mária Ganajová, CSc.							
Date of last modification:							
Approved:							

University: P. J. S	Šafárik Univers	sity in Košice					
Faculty: Faculty	of Science						
Course ID: ÚFV/ SPDdps/20 Course name: Didaktika fyziky							
Course type, sco Course type: Recommended Per week: Per Course method	course-load (h study period:						
Number of ECT	S credits: 1						
Recommended s	emester/trime	ster of the cours	e:				
Course level: N							
Prerequisities:	,						
Conditions for co	ourse complet	ion:		_			
Learning outcon	nes:						
Brief outline of t	he course:						
Recommended li	terature:			_			
Course language	::						
Notes:				-			
Course assessme Total number of a		nts: 3					
A	В	С	D	Е	FX		
100.0	0.0	0.0	0.0	0.0	0.0		
Provides:				<u>I</u>	ı		
Date of last mod	ification:						
Approved:				=			

University: P. J. Šafárik University in Košice									
Faculty: Faculty of Science									
Course ID: ÚF dDF1/20	Course ID: ÚFV/ dDF1/20 Course name: Didaktika fyziky 1								
Course type, sc	Course type, scope and the method:								
Course type: I									
	d course-load (h	,							
	r study period: 1	2s							
Course metho									
Number of EC	TS credits: 2								
Recommended	semester/trimes	ter of the cours	e: 2.						
Course level: N									
Prerequisities:	Prerequisities:								
Conditions for course completion:									
Learning outco	Learning outcomes:								
Brief outline of	the course:								
Recommended	literature:			_					
Course languag	ge:								
Notes:				_					
	Course assessment Total number of assessed students: 9								
A	В	С	D	Е	FX				
44.44	44.44 44.44 11.11 0.0 0.0 0.0								
Provides: doc. 1	Provides: doc. RNDr. Marián Kireš, PhD.								
Date of last modification:									
Approved:									

University: P. J.	University: P. J. Šafárik University in Košice							
Faculty: Faculty of Science								
Course ID: ÚFV/ Course name: Didaktika fyziky 2								
Course type, sco Course type: L Recommended Per week: Per Course method	ecture course-load (h study period: l: present	ours):						
Number of ECT								
Recommended s	semester/trimes	ster of the cours	e: 3.					
Course level: N								
Prerequisities:								
Conditions for course completion:								
Learning outcor	Learning outcomes:							
Brief outline of	the course:							
Recommended I	iterature:			_				
Course language	e:							
Notes:				_				
	Course assessment Total number of assessed students: 5							
A	В	С	D	Е	FX			
80.0 20.0 0.0 0.0 0.0 0.0								
Provides: doc. R	Provides: doc. RNDr. Marián Kireš, PhD.							
Date of last modification:								
Approved:								

University: P. J. Šat	University: P. J. Šafárik University in Košice							
Faculty: Faculty of	Faculty: Faculty of Science							
Course ID: ÚBEV/dDGOP/20	Course ID: ÚBEV/ Course name: Didaktika geológie a ochrany prírody dDGOP/20							
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 12s Course method: present								
Number of ECTS of								
Recommended sem	ester/trimes	ster of the cours	e: 3.					
Course level: N								
Prerequisities:	Prerequisities:							
Conditions for cou	Conditions for course completion:							
Learning outcomes:								
Brief outline of the	course:							
Recommended liter	rature:							
Course language:								
Notes:								
	Course assessment Total number of assessed students: 3							
A	В	С	D	Е	FX			
100.0	100.0 0.0 0.0 0.0 0.0							
Provides: RNDr. Iv	Provides: RNDr. Ivana Slepáková, PhD., PaedDr. Andrea Lešková, PhD.							
Date of last modification:								
Approved:	Approved:							

University: P. J.	University: P. J. Šafárik University in Košice							
Faculty: Faculty	y of Science							
Course ID: ÚINF/ Course name: Didaktika informatiky SPDdps/20								
Course type: Recommended	ope and the med d course-load (h r study period: d: present							
Number of EC	ΓS credits: 1	,						
Recommended	semester/trimes	ster of the cours	e:					
Course level: N	-							
Prerequisities:								
Conditions for	course completi	on:						
Learning outco	mes:							
Brief outline of	the course:							
Recommended	literature:							
Course languag	ge:							
Notes:								
Course assessm Total number of	ent f assessed studen	ts: 3						
A	В	С	D	Е	FX			
66.67 33.33 0.0 0.0 0.0 0.0								
Provides:								
Date of last mo	dification:							
Approved:	,			-				

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ | **Course name:** Didaktika informatiky 1

dDIN1/20

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: Per study period: 12s

Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 2.

Course level: N

Prerequisities:

Conditions for course completion:

Conditions for ongoing evaluation:

- 1. Proposal of a thematic plan for teaching informatics at secondary or elementary school.
- 2. Creation of a concept map, dictionary of basic concepts and specific educational objectives for selected topic of school informatics.
- 3. Creating a worksheet with selected formative assessment tools.
- 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.

Learning outcomes:

The student will gain an overview of the objectives, content, modern didactic methods and tools of teaching school informatics; create a inquiry-based methodology of teaching a selected topic of school informatics; become familiar with the methodology of teaching selected topics from the thematic area of Representations and Tools.

Brief outline of the course:

- 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. Activating methods of teaching school informatics (discussion and situational methods).
- 5. Activating methods of teaching school informatics (staging methods, educational games, scientific humor).
- 6. Activating methods of teaching school informatics (problem teaching, peer learning).
- 7. Activating methods of teaching school informatics (project teaching, flipped learning).
- 8. Inquiry-based learning, inquiry cycle, inquiry skills, levels of inquiry, 5E learning cycle.
- 9. Formative assessment, cognitive and metacognitive tools. Creating a worksheet with selected formative assessment tools.

- 10. Methodology of teaching selected topics in the field of Representation and tools (coding, compression, encryption).
- 11. Methodology of teaching selected topics in the field of Representation and tools (data analysis and visualization).
- 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/aktivizujúce metody.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

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: 3

A	В	C	D	Е	FX
66.67	33.33	0.0	0.0	0.0	0.0

Provides: doc. RNDr. L'ubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD., univerzitný docent

Date of last modification: 03.08.2021

Approved:

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ | Course name: Didaktika informatiky 2

dDIN2/20

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: Per study period: 12s

Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 3.

Course level: N

Prerequisities:

Conditions for course completion:

Conditions for ongoing evaluation:

- 1. Elaboration of the assignments and commented author's solutions of the tasks (motivational, systemization, 2 preparatory).
- 2. Assessment of administered didactic test.

Conditions for the final evaluation:

1. Development and presentation of a graded system of tasks with a didactic test for teaching a selected topic of school informatics.

Conditions for successful completion of the course:

Obtaining at least 50% of points for ongoing and final assignments.

Learning outcomes:

The student can select and explain the essential concepts for the selected topic of school informatics; create cognitive objectives, graded collection of tasks with a didactic test for teaching the selected topic of school informatics; analyze and evaluate the solutions of student tasks and identify their misconceptions; get acquainted with the methodology of teaching selected topics in the areas of Communication and Collaboration, Software and Hardware, Information Society.

Brief outline of the course:

- 1. Educational task, its forms, and parameters. A graded system of tasks.
- 2. Creation of a graded system of tasks for teaching a selected topic of school informatics.
- 3.-4. Assessment of students' learning outcomes in school informatics. Didactic tests.
- 5. Assessment of student projects. Student portfolio.
- 6. Conceptual process in school informatics.
- 7. Informatics concepts in informatics competitions (iBobor).
- 8. Informatics concepts in activities outside the computer (Computer Science Unplugged).
- 9. Methodology of teaching selected topics in the field of Communication and Cooperation (communication and collaboration tools).
- 10.-11. Methodology of teaching selected topics in the field of hardware and software (kits with sensors and actuators).
- 12. Methodology of teaching selected topics in the field of Information Society (information security and cybersecurity).

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 uloh a hodnotenie.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

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

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: 3

A	В	С	D	E	FX
66.67	33.33	0.0	0.0	0.0	0.0

Provides: doc. RNDr. L'ubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD., univerzitný docent

Date of last modification: 03.08.2021

Approved:

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Essentials of Special Education ZSPdps/19 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 6s Course method: present **Number of ECTS credits: 1 Recommended semester/trimester of the course:** 3. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 58 \mathbf{C} Ε Α В D FX 43.1 22.41 8.62 15.52 8.62 1.72 Provides: PaedDr. Michal Novocký, PhD., doc. PaedDr. Renáta Orosová, PhD. Date of last modification: 14.09.2024 Approved:

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: Course name: Introduction to Research Methodology in Education and

KPPaPZ/ Psychology

ZMPPVdps/15

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: Per study period: 12s

Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 2.

Course level: N

Prerequisities:

Conditions for course completion:

active participation in seminars, implementation of assignments in groups, final work

Learning outcomes:

The graduate of the course will gain information about the research methodology. Understand the basics methods of pedagogical and psychological research that can be used in the practice of the teacher. As part of 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 implement simple scientific research, present research results and read the latest results research in the field of pedagogy and psychology.

Brief outline of the course:

Research in pedagogy and psychology. Scientific research, scientific thinking. Parts of a research project. Research planning. Topic selection, research problem creation

Types of research plans. Hypothesis, variables, operationalization. Ethical issues of research. Experiment (experiment problems, control of variables in the 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.

Recommended literature:

Bačíková, M., Janovská, A., Orosová, O. Základy metodológie pedagogicko-psychologického výskumu. 2.doplnené vydanie. Šafárik Press, 2019. dostupné online: https://unibook.upjs.sk/img/cms/2019/FF/zaklady-metodologie-ped-psych-vyskumu-2-vyd-web.pdf

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.

http://www.e-metodologia.fedu.uniba.sk/

Course language:

Notes:							
Course assessr Total number of	nent of assessed studen	ts: 76					
A B C D E FX							
61.84	23.68	9.21	2.63	2.63	0.0		
Provides: doc. Mgr. Mária Bačíková, PhD.							
Date of last modification: 24.06.2022							
Approved:							

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚMV/ Course name: Mathematical problem solving strategies I dMRUa/24 Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 1 Per study period: 14 Course method: present **Number of ECTS credits: 1** Recommended semester/trimester of the course: Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 28 C Α В D Ε FX 3.57 0.0 17.86 32.14 14.29 32.14 Provides: prof. RNDr. Jozef Doboš, CSc. Date of last modification: 29.02.2024 Approved:

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚMV/ Course name: Mathematical problem solving strategies II dMRUb/24 Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 1 Per study period: 14 Course method: present **Number of ECTS credits: 1** Recommended semester/trimester of the course: Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 13 C Α В D Ε FX 23.08 38.46 23.08 0.0 15.38 0.0 Provides: doc. RNDr. Ingrid Semanišinová, PhD. Date of last modification: 29.02.2024 Approved:

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚMV/ Course name: Mathematical problem solving strategies III dMRUc/24 Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 1 Per study period: 14 Course method: present **Number of ECTS credits: 1** Recommended semester/trimester of the course: Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 6 \mathbf{C} Α В D Ε FX 50.0 0.0 50.0 0.0 0.0 0.0 Provides: doc. RNDr. Stanislav Lukáč, PhD. Date of last modification: 29.02.2024 Approved:

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚFV/ Course name: Moderná fyzika z pohľadu didaktiky fyziky dMFDF/20 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 6s Course method: present **Number of ECTS credits: 1 Recommended semester/trimester of the course:** 3. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 11 C Α В D Ε FX 36.36 36.36 18.18 9.09 0.0 0.0 Provides: doc. RNDr. Jozef Hanč, PhD. Date of last modification: Approved:

Page: 37

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚGE/ Course name: Nové trendy vo vyučovaní geografie dNTVG/20 Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 12s Course method: present **Number of ECTS credits: 2** Recommended semester/trimester of the course: 3. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 \mathbf{C} Α В D Ε FX 0.0 0.0 0.0 0.0 0.0 0.0 Provides: RNDr. Stela Csachová, PhD., RNDr. Alena Gessert, PhD., univerzitná docentka Date of last modification: Approved:

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ | Course name: Pedagogická prax

PPdps/20

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: Per study period: 40s

Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course: 4.

Course level: N

Prerequisities:

Conditions for course completion:

Conditions for ongoing evaluation:

- 1. Observations in 8 lessons of the subject of informatics.
- 2. Independent leading of 32 lessons of the subject informatics.

Conditions for the final evaluation:

- 1. Submission of 8 observation records from lessons.
- 2. Submission of 32 lesson projects of preparation for lessons.
- 3. Submission of a list of observations and own lesson of the trainee.
- 4. Submission of an evaluation of the trainee's teaching practice.
- 5. Submission of a report on the pedagogical practice.
- 6. Submission of a feedback sheet from the pedagogical practice.

Conditions for successful completion of the course:

Fulfillment of all ongoing and final assignments.

Learning outcomes:

Under the professional supervision of an experienced teacher trainer, the student acquires practical pedagogical skills in teaching the subject of informatics. He/She gets acquainted with school life, out of-class and after-school activities activities.

Brief outline of the course:

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.

Recommended literature:

KOSOVÁ, Beata, Alena TOMENGOVÁ et al, 2015. Profesijná praktická príprava budúcich učiteľov [online]. Banská Bystrica: Vydavateľstvo Belianum, Univerzita Mateja Bela, Banská Bystrica, 226 p. [cited 2021-7-28]. ISBN 978-80-557-0860-7. Available from: https://publikacie.umb.sk/publication/publicationFileDownload.php?ID=18667

OROSOVÁ, Renáta and Zuzana BOBEROVÁ, 2016. Pregraduálna príprava učiteľov: Organizácia pedagogickej praxe na UPJŠ [online]. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 142 p. [cited 2021-7-28]. ISBN 978-80-8152-460-8. Available from: https://

unibook.upjs.sk/sk/pedagogika/342-pregradualna-priprava-ucitelov-organizacia-pedagogickejpraxe-na-upjs

BOBEROVÁ, Zuzana, 2017. Začínajúci učiteľ a školská legislatíva I. [online].

Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 104 p. [cited 2021-7-28]. ISBN

978-80-8152-490-5. Available from: https://unibook.upjs.sk/sk/pedagogika/398-zacinajuci-ucitel-a-skolskalegislativa-i

Current informatics textbooks for primary and secondary schools in the Slovak Republic

Course language:

Slovak

Notes:

A student can be recognized in this subject if he/she proves his/her teaching experience in the subject of informatics of at least 32 hours and submits his/her sample preparations for at least 3 lessons of informatics with a certificate from the school principal.

Course assessment

Total number of assessed students: 3

abs	n
100.0	0.0

Provides: doc. RNDr. L'ubomír Šnajder, PhD.

Date of last modification: 04.08.2021

Approved:

University: P. J. Šafárik University in Košice						
Faculty: Faculty of S	Faculty: Faculty of Science					
Course ID: ÚGE/ PPdps/20	Course name: Pedagogick	á prax				
Course type: Practic Recommended cour Per week: Per stud Course method: pre	Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 40s Course method: present					
Number of ECTS cr	edits: 5					
Recommended seme	ster/trimester of the cours	e: 4.				
Course level: N						
Prerequisities:						
Conditions for cours	se completion:					
Learning outcomes:						
Brief outline of the c	ourse:					
Recommended litera	nture:					
Course language:						
Notes:						
Course assessment Total number of asse	Course assessment Total number of assessed students: 0					
abs n						
0.0						
Provides:						
Date of last modification:						
Approved:						

University: P. J. Šafárik University in Košice						
Faculty: Faculty of S	Faculty: Faculty of Science					
Course ID: ÚBEV/ PPdps/20	Course name: Pedagogick	rá prax				
Course type: Practic Recommended cour Per week: Per stud	Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 40s Course method: present					
Number of ECTS cr	edits: 5					
Recommended seme	ster/trimester of the cours	e: 4.				
Course level: N						
Prerequisities:						
Conditions for cours	se completion:					
Learning outcomes:						
Brief outline of the c	ourse:					
Recommended litera	nture:					
Course language:						
Notes:						
Course assessment Total number of asse	Course assessment Total number of assessed students: 3					
abs n						
100.0 0.0						
Provides:						
Date of last modification:						
Approved:						

University: P. J. Šafárik University in Košice						
Faculty: Faculty of S	Faculty: Faculty of Science					
Course ID: ÚCHV/ PPdps/20						
Course type: Practic Recommended cour Per week: Per stud Course method: pre	Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 40s Course method: present					
Number of ECTS cr						
Recommended seme	ster/trimester of the cours	e: 4.				
Course level: N						
Prerequisities:						
Conditions for cours	e completion:					
Learning outcomes:						
Brief outline of the c	ourse:					
Recommended litera	iture:					
Course language:						
Notes:						
Course assessment Total number of assessed students: 7						
abs n						
100.0 0.0						
Provides:						
Date of last modification:						
Approved:						

University: P. J. Šafárik University in Košice						
Faculty: Faculty of S	Faculty: Faculty of Science					
Course ID: ÚFV/ PPdps/20						
Course type: Practic Recommended cour Per week: Per stud Course method: pre	Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 40s Course method: present					
Number of ECTS cr						
Recommended seme	ster/trimester of the cours	e: 4.				
Course level: N						
Prerequisities:						
Conditions for cours	se completion:					
Learning outcomes:						
Brief outline of the c	ourse:					
Recommended litera	nture:					
Course language:						
Notes:						
Course assessment Total number of assessed students: 3						
abs n						
100.0 0.0						
Provides:						
Date of last modification:						
Approved:						

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ Cours

Course name: Pedagogy and Psychology

DPP/14

Course type, scope and the method:

Course type:

Recommended course-load (hours):

Per week: Per study period: Course method: present

Number of ECTS credits: 1

Recommended semester/trimester of the course:

Course level: N

Prerequisities: ((KPPaPZ/PPgUdps/15 or KPPaPZ/PPgU/15) and (KPE/PDUdps/15 or KPE/

PDU/15))

Conditions for course completion:

Obtaining the required number of credits in the prescribed composition by the study plan.

Learning outcomes:

The student is able to demonstrate the acquired competencies in accordance with the profile of the graduate.

Brief outline of the course:

Pedagogy: Pedagogy, basic pedagogical categories, system of pedagogical scientific disciplines. Education, pages and functions of education, educational process, self-education. Factors of education, educated individual, pedagogue, pedagogical profession, professional competencies. School education, family education. Educational goals, taxonomy, requirements, classification of educational goals. Methods of education. Pedagogical principles. The school system of the Slovak Republic. Didactics, basic questions of didactics, current starting points of didactics. Objectives of the teaching process, the work of the teacher with the objectives of teaching. Content of education, basic curriculum, extension curriculum, elements and components of curriculum. Assessment in school education, types, functions and assessment criteria. Pedagogical control, methods and forms of pedagogical control. Teacher's work planning, written preparation of the teacher for teaching. Teaching process, stages of the teaching process and their didactic functions. Organizational forms of teaching, lesson, stages, types of lessons. Teaching methods, classification, functions, selection of teaching methods. Didactic principles of the teaching process. Basic pedagogical documents, textbook, functions and structural components of the textbook. Current concepts of the teaching process.

Psychology: Feeling, feelings, perception, perception, attention. Peculiarities of the mentioned cognitive processes in relation to school success / failure. Memory. Memory processes. Thinking. Properties and types of thinking. Thinking as a solution to problems. Peculiarities of the mentioned cognitive processes in relation to school success / failure. Cognitivistic and behavioral approach to learning. Analysis of learned activity. Cognitive, teaching and intellectual styles. Motivation, feelings. Noncognitive assumptions of school success (Cognitive, performance, social needs of the student. Perspective orientation of the student. Rewards and punishments. Boredom and fear. Learning habits and performance of the student). Personality concepts. Temperament.

Character. Pupil's self-confidence and school performance. Intelligence. Creativity. Talent. Personality peculiarities, typology of gifted children, work with gifted students. Psychological concepts of personality and their reflection in the perspectives of education. (Psychoanalysis. Individual psychology. Logotherapy. Behaviorism and ecobehavioral approach). Psychological concepts of personality and their reflection in the perspectives of education. (Humanistic psychology. The concept of creative-humanistic education. Cognitive psychology. Constructivism. Narrative psychology.) School readiness, maturity and younger school age. Puberty. Psychological peculiarities of adolescence and adulthood. Peculiarities of cognitive and psychosocial development of an individual (Theories of cognitive development of J. Piaget, L. Vygotský, J. Bruner. Theory of psychosocial development of E. H. Erikson.) Social perception, cognition, communication. Aggression and violence. Family. (The family as a changing system. Factors influencing the functioning of the family. Dysfunction and disintegration of the family. Problems associated with inappropriate family activities. Domestic violence.) Small social groups. Socio-psychological and pedagogical-psychological essence of the school class. Pupil status in the classroom and relationships between students. Problem behavior of students and its solution. Conflict, frustration, stress, their consequences on the survival and behavior of students and teachers. Mechanisms of mental adaptation to stressful situations. Strategies for managing and managing classroom processes in relation to students' problem behavior. Teacher-student interaction (Teacher's role behavior. Individual and personality characteristics of the teacher. Teacher's educational style. Teacher's attitude towards the student). Pedagogical-psychological counseling. Stages of the counseling process. Crisis intervention at school. Cooperation between teacher and psychologist. Psychological examination.

Recommended	literature:			_	
Course languag	ge:				
Notes:	,				
Course assessn Total number o	nent f assessed studer	nts: 121			
A	В	С	D	Е	FX
14.88	26.45	29.75	19.83	9.09	0.0
Provides:	<u> </u>	I	I		
Date of last mo	dification: 23.0°	7.2024			

Approved:

University: P. J. Ša	University: P. J. Šafárik University in Košice					
Faculty: Faculty of	Faculty: Faculty of Science					
Course ID: ÚFV/ dPSP/20	I					
Course type, scope Course type: Prac Recommended co Per week: Per st Course method:	ctice ourse-load (he cudy period: 1	ours):				
Number of ECTS				=		
Recommended ser	mester/trimes	ter of the course	e: 4.			
Course level: N						
Prerequisities:						
Conditions for cou	urse completi	on:				
Learning outcome	es:					
Brief outline of the	e course:					
Recommended lite	erature:					
Course language:						
Notes:						
Course assessmen Total number of as		ts: 5				
A	В	С	D	Е	FX	
80.0	20.0	0.0	0.0	0.0	0.0	
Provides: doc. RN	Dr. Zuzana Je	šková, PhD.				
Date of last modif	ication:					
Approved:						

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: Cours

Course name: Professional Ethics for Teachers and School Counsellors

KPPaPZ/EPUdps/15

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: Per study period: 6s

Course method: present

Number of ECTS credits: 1

Recommended semester/trimester of the course: 2.

Course level: N

Prerequisities:

Conditions for course completion:

1. Active participation on lessons - 50p, 2. Preparation of own output - 50p. 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.

Learning outcomes:

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. Teh 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 ethic codes). 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.

Brief outline of the course:

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:

Ráczová, 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. Profesijná etika: FF PU. 2008.

Miezgová J., Vargová, D. Etika. SPN Mladé letá 2007. R

emišová A. Dejiny etického myslela 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: 85

A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: doc. Mgr. Gabriel Baník, PhD., Mgr. Lucia Barbierik, PhD.

Date of last modification: 24.06.2022

Approved:

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Psychology and Educational Psychology KPPaPZ/ PPgUdps/15 Course type, scope and the method: Course type: Lecture **Recommended course-load (hours):** Per week: Per study period: 24s Course method: present **Number of ECTS credits: 4 Recommended semester/trimester of the course:** 1. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature: Course language: Notes: Course assessment** Total number of assessed students: 91 В C A D E FX 7.69 18.68 26.37 24.18 20.88 2.2 Provides: PhDr. Anna Janovská, PhD., prof. PhDr. Oľga Orosová, CSc. Date of last modification: 14.09.2024 Approved:

Page: 50

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚGE/ Course name: Regionálna geografia I dRG1/20 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 12s Course method: present **Number of ECTS credits: 2** Recommended semester/trimester of the course: 1. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 \mathbf{C} Α В D Ε FX 0.0 0.0 0.0 0.0 0.0 0.0 Provides: RNDr. Stela Csachová, PhD., RNDr. Alena Gessert, PhD., univerzitná docentka Date of last modification: Approved:

University: P. J.	Šafárik Univers	ity in Košice				
Faculty: Faculty	Faculty: Faculty of Science					
Course ID: ÚGF dRG2/20	Course ID: ÚGE/ IRG2/20 Course name: Regionálna geografía II					
Course type, sco Course type: L Recommended Per week: Per Course method	ecture course-load (h study period: 1 l: present	ours):				
Number of ECT						
Recommended s	semester/trimes	ter of the cours	e : 4.			
Course level: N						
Prerequisities:						
Conditions for c	ourse completi	on:				
Learning outcom	nes:					
Brief outline of	the course:					
Recommended l	iterature:					
Course language	e:					
Notes:						
Course assessme Total number of		ts: 0				
A	В	С	D	Е	FX	
0.0	0.0	0.0	0.0	0.0	0.0	
Provides: doc. M	Igr. Ladislav No	votný, PhD., Mg	r. Veronika Ond	ová		
Date of last mod	lification:					
Approved:				-		

Page: 52

University: P. J. Šafárik University in Košice						
Faculty: Faculty of S	Faculty: Faculty of Science					
Course ID: ÚBEV/ dSZP/20	Course name: Seminár k z	záverečnej práci				
Course type: Practic Recommended cour Per week: Per stud	Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 10s Course method: present					
Number of ECTS cr	edits: 2					
Recommended seme	ster/trimester of the cours	e: 4.				
Course level: N						
Prerequisities:						
Conditions for cours	e completion:					
Learning outcomes:						
Brief outline of the c	ourse:					
Recommended litera	iture:					
Course language:						
Notes:						
Course assessment Total number of assessed students: 1						
	abs n					
100.0 0.0						
Provides:						
Date of last modification:						
Approved:						

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ | Course name: Seminár k záverečnej práci

dSZP/20

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: Per study period: 10s

Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 4.

Course level: N

Prerequisities:

Conditions for course completion:

Conditions for ongoing evaluation:

- 1. Presentation and discussion of the ongoing results of own final thesis.
- 2. Discussion with ideas and recommendations to improve colleagues' final theses.

Conditions for successful completion of the course:

Fulfillment of all ongoing and final assignments.

Learning outcomes:

The student gets an idea of the structure of the final thesis and its life cycle, orientates in information sources on didactics of informatics. The student, while presenting the ongoing results of his/her final thesis, receives recommendations and ideas for its finalization.

Brief outline of the course:

- 1. Final theses of DPŠ focused on the teaching of informatics (thesis structure, thesis life cycle). Analysis of selected final theses of DPŠ (CRZP).
- 2. Overview of information resources (informatics curricula, available publication databases, journals and conference proceedings, educational projects, textbooks).
- 3. -12. Presentation and discussion of the ongoing results of the final thesis.

Recommended literature:

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

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

BAČÍKOVÁ, Mária, Anna JANOVSKÁ 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 p. [cited 2021-7-29]. ISBN 978-80-8152-805-7. Available from: https://unibook.upjs.sk/sk/filozofickafakulta/1266-zaklady-metodologie-pedagogicko-psychologickeho-vyskumu-sprievodca-prestudentovucitelstva

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

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: 2

abs	n
100.0	0.0

Provides: doc. RNDr. L'ubomír Šnajder, PhD.

Date of last modification: 04.08.2021

Approved:

University: P. J. Šafárik University in Košice						
Faculty: Faculty of S	Faculty: Faculty of Science					
Course ID: ÚCHV/ dSZP/20	J 1					
Course type: Practic Recommended cour Per week: Per stud Course method: pre	Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 10s Course method: present					
Number of ECTS cr	edits: 2					
Recommended seme	ster/trimester of the course	2: 4.				
Course level: N						
Prerequisities:						
Conditions for cours	se completion:					
Learning outcomes:						
Brief outline of the c	ourse:					
Recommended litera	iture:					
Course language:						
Notes:						
Course assessment Total number of assessed students: 7						
	abs n					
	100.0 0.0					
Provides:	Provides:					
Date of last modification:						
Approved:						

University: P. J. Šafárik University in Košice				
Faculty: Faculty of S	cience			
Course ID: ÚFV/ dSZP/20 Course name: Seminár k záverečnej práci				
Course type, scope a Course type: Practic Recommended cour Per week: Per stud Course method: pre	ce rse-load (hours): y period: 10s esent			
Number of ECTS cr	edits: 2			
Recommended seme	ster/trimester of the cours	2: 4.		
Course level: N				
Prerequisities:				
Conditions for cours	e completion:			
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended litera	iture:			
Course language:				
Notes:				
Course assessment Total number of assessed students: 3				
	abs	n		
100.0 0.0				
Provides:				
Date of last modifica	Date of last modification:			
Approved:				

University: P. J. Šafá	rik University in Košice				
Faculty: Faculty of S	cience				
Course ID: ÚGE/ dSZP/20	J r				
Course type, scope a Course type: Practic Recommended cour Per week: Per stud Course method: pre	ce rse-load (hours): ly period: 10s esent				
Number of ECTS cr	edits: 2				
Recommended seme	ster/trimester of the cou	irse: 4.			
Course level: N	,				
Prerequisities:					
Conditions for cours	e completion:				
Learning outcomes:					
Brief outline of the c	ourse:				
Recommended litera	iture:				
Course language:					
Notes:					
Course assessment Total number of asse	ssed students: 0				
abs n					
0.0					
Provides:		-			
Date of last modifica	ation:				
Approved:	,				

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Teaching Methodology and Pedagogy PDUdps/15 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 24s Course method: present **Number of ECTS credits: 4 Recommended semester/trimester of the course:** 1. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 89 C Α В D Ε FX 23.6 32.58 16.85 16.85 10.11 0.0 Provides: doc. PaedDr. Renáta Orosová, PhD. Date of last modification: 18.09.2024 Approved:

University: P. J. Šafá	rik University in Košice				
Faculty: Faculty of S	Faculty: Faculty of Science				
Course ID: ÚMV/ dPDP/24	\mathcal{S}_{1}				
Course type, scope a Course type: Practic Recommended cour Per week: Per stud Course method: pre	ce rse-load (hours): ly period: 40s esent				
Number of ECTS cr	edits: 5				
Recommended seme	ster/trimester of the course	4 .			
Course level: N					
Prerequisities:					
Conditions for cours	e completion:				
Learning outcomes:					
Brief outline of the c	ourse:				
Recommended litera	iture:				
Course language:					
Notes:	Notes:				
Course assessment Total number of asses	ssed students: 0				
	abs	n			
0.0					
Provides: doc. RNDr. Ingrid Semanišinová, PhD., RNDr. Veronika Hubeňáková, PhD.					
Date of last modification:					
Annroyed:					

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: Course name: The Art of Aiding by Verbal Exchange

KPPaPZ/UPRdps/15

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: Per study period: 6s

Course method: present

Number of ECTS credits: 1

Recommended semester/trimester of the course: 3.

Course level: N

Prerequisities:

Conditions for course completion:

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.

Learning outcomes:

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 the needs, expectations and opinions of students 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.

Brief outline of the course:

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. Systemic approach to help. 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 an interview, negotiating the course, progress, ending the interview. Constructivist issues in conversation. Analysis of individual phases of interviewing. Reflective team interview options. Models of reflection 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.

with a group.							
Recommended	Recommended literature:						
Course langua	Course language:						
Notes:							
Course assessment Total number of assessed students: 72							
A	В	C	D	Е	FX		
51.39 20.83 20.83 1.39 5.56 0.0							
Provides: Mgr. Ondrej Kalina, PhD.							
Date of last modification: 10.02.2025							

Approved:

University: P. J. Šafárik University in Košice						
Faculty: Facult	Faculty: Faculty of Science					
Course ID: ÚMV/ dZPO/24 Course name: Thesis defence						
Course type: Recommende	cope and the med d course-load (h r study period: d: present					
Number of EC	TS credits: 14					
Recommended	semester/trimes	ster of the cours	e:			
Course level: N	Ţ					
Prerequisities:						
Conditions for	course completi	ion:				
Learning outco	omes:					
Brief outline of	the course:					
Recommended	literature:					
Course languaş	ge:					
Notes:						
Course assessment Total number of assessed students: 0						
A	В	С	D	Е	FX	
0.0 0.0 0.0 0.0 0.0						
Provides:						
Date of last modification:						
Approved:						

University: P. J. Šafárik University in Košice						
Faculty: Faculty of S	Faculty: Faculty of Science					
Course ID: ÚMV/ dZVP/24	Course name: Thesis proje	ect				
Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 1 Per study period: 14 Course method: present						
Number of ECTS cr						
	ster/trimester of the course	e : 4.	_			
Course level: N						
Prerequisities:						
Conditions for cours	se completion:					
Learning outcomes:						
Brief outline of the c	ourse:					
Recommended litera	iture:					
Course language:						
Notes:	Notes:					
Course assessment Total number of asse	ssed students: 0					
abs n						
0.0						
Provides:						
Date of last modification: 29.02.2024						
Approved:						

University: P. J.	Šafárik Univers	ity in Košice			
Faculty: Faculty	of Science			_	
Course ID: ÚFV/ dVPF/20 Course name: Vybrané problémy všeobecnej fyziky					
Course type, sco Course type: L Recommended Per week: Per Course method	ecture course-load (h study period: (ours):			
Number of ECT					
Recommended s	semester/trimes	ster of the cours	e: 2.		
Course level: N					
Prerequisities:					
Conditions for c	ourse completi	on:			
Learning outcor	nes:				
Brief outline of t	the course:				
Recommended I	iterature:				
Course language	2:				
Notes:					
Course assessme Total number of		ts: 5			
A	В	С	D	Е	FX
100.0 0.0 0.0 0.0 0.0					
Provides: doc. R	NDr. Marián K	ireš, PhD.			ı
Date of last mod	lification:				
Approved:					

Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Záverečná práca a jej obhajoba ZPOdps/20 Course type, scope and the method: Course type: Recommended course-load (hours):					
ZPOdps/20 Course type, scope and the method: Course type:					
Course type:					
Per week: Per study period: Course method: present					
Number of ECTS credits: 14					
Recommended semester/trimester of the course:					
Course level: N					
Prerequisities:					
Conditions for course completion:					
Learning outcomes:					
Brief outline of the course:					
Recommended literature:					
Course language:					
Notes:					
Course assessment Total number of assessed students: 7					
A B C D E FX					
100.0 0.0 0.0 0.0 0.0					
Provides:					
Date of last modification:					
Approved:					

University: P. J.	Šafárik Univers	ity in Košice			
Faculty: Faculty	of Science				
Course ID: ÚBEV/ Course name: Záverečná práca a jej obhajoba ZPOdps/20					
Per week: Per Course method	course-load (h study period: l: present				
Number of ECT	S credits: 14				
Recommended	semester/trimes	ster of the cours	e:		
Course level: N					
Prerequisities:					
Conditions for o	course completi	on:			
Learning outcom	mes:				
Brief outline of	the course:				
Recommended	literature:				
Course languag	e:				
Notes:					
Course assessme Total number of		ts: 2			
A	В	С	D	Е	FX
100.0 0.0 0.0 0.0 0.0					
Provides:			•	•	•
Date of last mod	lification:				
Approved:				-	

University: P. J.	. Šafárik Univers	ity in Košice			
Faculty: Faculty	y of Science				
Course ID: ÚINF/ ZPOdps/20 Course name: Záverečná práca a jej obhajoba					
Course type: Recommended Per week: Per Course metho					
Number of EC					
	semester/trimes	ter of the course	2.		
Course level: N					
Prerequisities:					
Conditions for	course completi	on:			
Learning outco	mes:				
Brief outline of	the course:				
Recommended	literature:				
Course languag	ge:				
Notes:					
Course assessm Total number of	nent f assessed studen	ts: 3			
A	В	С	D	Е	FX
66.67 0.0 33.33 0.0 0.0 0.0					
Provides:					
Date of last mo	dification:				
Approved:	,				

University: P. J.	Šafárik Universi	ty in Košice				
Faculty: Faculty	of Science					
Course ID: ÚFV ZPOdps/20						
Per week: Per Course method	course-load (ho study period: l: present					
Number of ECT						
Recommended s	semester/trimes	ter of the cours	e:			
Course level: N						
Prerequisities:	,					
Conditions for c	ourse completio	on:				
Learning outcom	nes:					
Brief outline of	the course:					
Recommended I	iterature:			-		
Course language	e:					
Notes:	,					
Course assessme Total number of	-	s: 3				
A	В	С	D	Е	FX	
100.0	100.0 0.0 0.0 0.0 0.0					
Provides:						
Date of last mod	lification:					
Approved:				=		

University: P. J.	Šafárik Univers	sity in Košice			
Faculty: Faculty	of Science				
Course ID: ÚGE/ ZPOdps/20 Course name: Záverečná práca a jej obhajoba					
Course type, sco Course type: Recommended Per week: Per Course method	course-load (lestudy period:				
Number of ECT					
	semester/trime	ster of the cours	e: 		
Course level: N					
Prerequisities:					
Conditions for o	course complet	ion:			
Learning outcom	mes:				
Brief outline of	the course:				
Recommended	literature:				
Course languag	e:				
Notes:					
Course assessm Total number of		nts: 0			
A	В	С	D	Е	FX
0.0 0.0 0.0 0.0 0.0					
Provides:					
Date of last mod	dification:				
Approved:	,			-	

Page: 70

University: P. J.	Šafárik Univers	ity in Košice			
Faculty: Faculty	of Science				
Course ID: ÚBE dSPP/20	EV/ Course name: Školské pokusy a pozorovania				
Course type, sco Course type: Pr Recommended Per week: Per Course method	ractice course-load (h study period:	ours):			
Number of ECT	S credits: 2				
Recommended s	emester/trimes	ster of the cours	se: 3.		
Course level: N					
Prerequisities:					
Conditions for c	ourse completi	on:			
Learning outcon	nes:				
Brief outline of t	the course:				
Recommended l	iterature:				
Course language	2:				
Notes:					
Course assessme Total number of		ts: 3			
A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: PaedD	r. Andrea Leško	ová, PhD.	,	•	
Date of last mod	ification:	,			
Approved:				=	

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚFV/ Course name: Školské počítačom podporované laboratórium dSPL/20 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 12s Course method: present **Number of ECTS credits: 2 Recommended semester/trimester of the course:** 3. Course level: N **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 9 \mathbf{C} A В D Ε FX 77.78 22.22 0.0 0.0 0.0 0.0 Provides: doc. RNDr. Zuzana Ješková, PhD. Date of last modification: Approved:

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ | Course name: Školské programovacie prostredia 1

dSPP1/20

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: Per study period: 12s

Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 2.

Course level: N

Prerequisities:

Conditions for course completion:

A minimum of 50 % marks in the practical tests at the middle and end of the semester

Learning outcomes:

Ability to implement more complex algorithms algorithms in the Python programming language. Ability to design and program educational software in the Python programming language. Formulate and solve school computer science problems.

Brief outline of the course:

- 1. Introduction to Python, basic features of Python, syntax.
- 2. Simple data types (number, logical type), structured types (string, list, dictionary, set, tuple).
- 3. Control structures (loops, conditional statements, exception management).
- 4. Function definition (parameters, return value), function documentation.
- 5. Import and creation of modules.
- 6. Error types and error condition handling. Exception handling and raising.
- 7. Saving data to a file and reading data from a file. Serializing data. Open data and its analysis.
- 8. Testing the correctness of algorithms (doctest, unittest), test data.
- 9. Object-oriented programming. Design and implementation of custom classes.
- 10. Creation of graphical interface of programs.
- 11. Design criteria, design and programming of educational software.
- 12. Solving more challenging algorithmic problems from real life or school practiceusing the object-oriented approach and the resources of the Python programming language.

Recommended literature:

PILGRIM, Mark. Dive into Python 3. 2. United States of America: Apress, 2004. ISBN

978-1430224150. Dostupné také z: https://diveintopython3.net/

SHIPMAN, John W. Tkinter 8.5 reference: a GUI for Python. Socorro, NM 87801: New

MexicoTech Computer Center, 2013. Dostupné také z: https://anzeljg.github.io/rin2/book2/2405/docs/tkinter.pdf

GUNIŠ, Ján, Viera MICHALIČKOVÁ, Martin CÁPAY a Ľubomír

ŠNAJDER.Riešenieproblémov a programovanie. Bratislava: Centrum vedecko-technických informácií SR,2020.ISBN 978-80-89965-62-5.

HETLAND, Magnus Lie. Beginning Python: from novice to professional. New York: Distributedto the book trade worldwide by Springer-Verlag, c2005. ISBN 1-59059-519-X. KRNÁČ, Jozef, Miloslava SUDOLSKÁ a Ľudovít TRAJTEĽ. Ďalšie vzdelávanie učiteľovzákladných škôl a stredných škôl v predmete informatika: Učiteľ s kompetenciami programátora.Bratislava: Štátny pedagogický ústav Bratislava, 2010. ISBN 978-80-8118-083-5.

Course language:

Slovak language, knowledge of English language is only required to read documentation of Python.

Course assessment

Total number of assessed students: 0

abs	n
0.0	0.0

Provides: doc. RNDr. L'ubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD., univerzitný docent

Date of last modification: 30.08.2021

Approved:

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ | Course name: Školské programovacie prostredia 2

dSPP2/20

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: Per study period: 12s

Course method: present

Number of ECTS credits: 2

Recommended semester/trimester of the course: 3.

Course level: N

Prerequisities:

Conditions for course completion:

Conditions for ongoing evaluation:

- 1. Educational software or game programmed in the Scratch environment,
- 2. A programming etude created for learning of programming in the MIT App Inventor environment.
- 3. Educational or assistive software programmed in the MIT App Inventor environment.
- 4. A programmed project using the BBC micro: bit kit.

Conditions for successful completion of the course:

Obtaining at least 50% of points for ongoing assignments.

Learning outcomes:

After completing this course, students are able to:

- a) get an overview of educational programming environments,
- b) acquire programming skills in selected educational programming environments,
- c) develop the ability to design and program educational software for devices using their sensors and actuators.

Brief outline of the course:

- 1. Teaching algorithmization and programming in primary and secondary school objectives, content, textbooks and methodological materials. Algorithmic computer games.
- 2. 4. Programming in the Scratch environment.
- 5. 9. Programming of mobile devices in the MIT App Inventor environment.
- 10. 11. Programming BBC micro: bit kits in MS MakeCode environment.
- 12. Overview of educational programming initiatives and development environments.

Recommended literature:

BELL, Charles A., 2017. Micropython for the internet of things: a beginner's guide to programming with Python on microcontrollers. New York, NY: Springer Science+Business Media. ISBN 9781484231227.

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

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

WOLBER, David, 2014. App Inventor: Vytvořte si vlastní aplikaci pro Android. Brno: Computer Press. ISBN 978-80-251-4195-3.

LOVÁSZOVÁ, Gabriela, Jana GALBAVÁ, Viera PALMÁROVÁ and Monika TOMCSÁNYIOVÁ, 2010. Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika: Malé programovacie jazyky. Bratislava: Štátny pedagogický ústav. ISBN 978-80-8118-066-8.

CODE.ORG. Learn today, build a brighter tomorrow.

Code.org [online]. [cited 2021-7-13]. Available from: https://code.org/

THE LIFELONG KINDERGARTEN GROUP AT MIT MEDIA LAB. Scratch - Imagine,

Program, Share [online]. [cited 2021-7-13]. Available from: https://scratch.mit.edu/

MASSACHUSETTS INSTITUTE OF TECHNOLOGY. MIT App Inventor

Explore MIT App Inventor [online]. [cited 2021-7-13]. Available from: http:// appinventor.mit.edu/

MICRO:BIT EDUCATIONAL FOUNDATION. BBC micro:bit [online]. [cited 2021-7-13]. Available from: https://microbit.org/

SPY O.Z. Učíme s Hardvérom [online]. [cited 2021-7-13]. Available from: https:// www.ucimeshardverom.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: 2

A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: doc. RNDr. L'ubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD., univerzitný docent

Date of last modification: 03.08.2021

Approved:

University: P. J.	Šafárik Universi	ty in Košice			
Faculty: Faculty	of Science				
Course ID: ÚCH dSPSP1/20	IV/ Course name: Špeciálne praktikum školských pokusov I				
Course type, sco Course type: Pr Recommended Per week: Per	ractice course-load (ho study period: 1	ours):			
Course method					
	Number of ECTS credits: 2				
Recommended s	emester/trimes	ter of the cours	e: 1.		
Course level: N					
Prerequisities:					
Conditions for c	ourse completion	on:			
Learning outcom	nes:				
Brief outline of t	he course:				
Recommended l	iterature:				
Course language):				
Notes:	,				
Course assessme Total number of		ts: 10			
A	В	С	D	Е	FX
90.0	10.0	0.0	0.0	0.0	0.0
Provides: RNDr.	Ivana Sotáková	, Ph.D.	L		I
Date of last mod	ification:			_	
Approved:				_	

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University: P. J. Šafá	rik Univers	sity in Košice			
Faculty: Faculty of S	Science				
Course ID: ÚCHV/ dSPSP2/20	Course name: Špeciálne praktikum školských pokusov II				
Course type, scope a Course type: Practi Recommended cou Per week: Per stuc Course method: pre	ce rse-load (h ly period: esent	ours):			
Number of ECTS cr					
Recommended seme	ester/trime	ster of the course	: 2.		
Course level: N					
Prerequisities:					
Conditions for cour	se completi	ion:			
Learning outcomes:	,				
Brief outline of the	course:				
Recommended litera	ature:				
Course language:					
Notes:					
Course assessment Total number of asse	essed studen	its: 3			
A	В	C	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0
Provides: RNDr. Jan	a Špaková l	Raschmanová, Ph	D.	,	
Date of last modifica	ation:				
Approved:					

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