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COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ dAMVB/20	**Course name:** Aktivizujúce metódy výučby biológie

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: 4

A	B	C	D	E	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:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ dAMCU/23	**Course name:** Aktivizujúce metódy výučby chémie

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: 7

A	B	C	D	E	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:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ dAIM/24	**Course name:** Application of ICT into mathematics teaching

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: 83

A	B	C	D	E	FX
49.4	28.92	19.28	1.2	1.2	0.0

Provides: doc. RNDr. Stanislav Lukáč, PhD.

Date of last modification: 29.02.2024

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPO/ SDaMdps/15	**Course name:** Child and Adolescent Sociology
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: Summary of assessment: A: 40-38; B: 37,5-35,5; C: 35-33; D: 32,5-30,5; E: 30-28; FX: less than 28	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 184

A	B	C	D	E	FX
46.74	22.28	17.93	8.15	3.8	1.09

Provides: doc. Mgr. Alexander Onufrák, PhD.	
Date of last modification: 27.08.2025	
Approved:	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPE/ MTdps/19	**Course name:** Class Management

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: 90

A	B	C	D	E	FX
51.11	33.33	11.11	4.44	0.0	0.0

Provides: doc. PaedDr. Renáta Orosová, PhD.

Date of last modification: 22.09.2025

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚGE/ SPDdps/20	**Course name:** Didactics of geography

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:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 0

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

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚGE/ dDIG1/20	**Course name:** Didactics of geography 1

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: 0

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

Provides: RNDr. Stela Csachová, PhD.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚGE/ dDIG2/20	**Course name:** Didactics of geography 2

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

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

Provides: RNDr. Stela Csachová, PhD.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ dDMT/24	**Course name:** Didactics of mathematics

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:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 2

A	B	C	D	E	FX
50.0	0.0	50.0	0.0	0.0	0.0

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ dDDMa/24	**Course name:** Didactics of mathematics I

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: 143

A	B	C	D	E	FX
31.47	29.37	25.87	8.39	3.5	1.4

Provides: doc. RNDr. Ingrid Semanišinová, PhD.

Date of last modification: 29.02.2024

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ dDDMb/24	**Course name:** Didactics of mathematics II

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: 144

A	B	C	D	E	FX
29.17	23.61	27.78	9.72	7.64	2.08

Provides: doc. RNDr. Ingrid Semanišinová, PhD.

Date of last modification: 29.02.2024

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ dDPRG/21	**Course name:** Didactics of programming

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	B	C	D	E	FX
14.69	32.17	22.38	14.69	12.59	3.5

Provides: doc. RNDr. Ľubomír Šnajder, PhD.

Date of last modification: 04.08.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/SPDdps/20	**Course name:** Didaktika biológie

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:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 3

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

Provides:

Date of last modification: 17.07.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ dDIB1/20	**Course name:** Didaktika biológie 1

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: 5

A	B	C	D	E	FX
40.0	60.0	0.0	0.0	0.0	0.0

Provides: PaedDr. Andrea Lešková, PhD.

Date of last modification: 28.04.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ dDIB2/20	**Course name:** Didaktika biológie 2

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: 5

A	B	C	D	E	FX
40.0	60.0	0.0	0.0	0.0	0.0

Provides: PaedDr. Andrea Lešková, PhD.

Date of last modification: 28.04.2023

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ SPDdps/20	**Course name:** Didaktika chémie

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:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 8

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

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ dDCH1/20	**Course name:** Didaktika chémie 1

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: 9

A	B	C	D	E	FX
77.78	0.0	0.0	22.22	0.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ dDCH2/20	**Course name:** Didaktika chémie 2

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: 13

A	B	C	D	E	FX
92.31	0.0	7.69	0.0	0.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ SPDdps/20	**Course name:** Didaktika fyziky

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:

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
100.0	0.0	0.0	0.0	0.0	0.0

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚFV/ dDF1/20	**Course name:** Didaktika fyziky 1

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: 9

A	B	C	D	E	FX
44.44	44.44	11.11	0.0	0.0	0.0

Provides: doc. RNDr. Marián Kireš, PhD.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚFV/ dDF2/20	**Course name:** Didaktika fyziky 2

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

A	B	C	D	E	FX
77.78	22.22	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Marián Kireš, PhD.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ dDGOP/20	**Course name:** Didaktika geológie a ochrany prírody

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: 4

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

Provides: RNDr. Anna Mišianiková, PhD., PaedDr. Andrea Lešková, PhD.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ SPDdps/20	**Course name:** Didaktika informatiky

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:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 3

A	B	C	D	E	FX
66.67	33.33	0.0	0.0	0.0	0.0

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ dDIN1/20	**Course name:** Didaktika informatiky 1
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/aktivizujuce_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: 4

A	B	C	D	E	FX
50.0	25.0	0.0	0.0	25.0	0.0

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

Date of last modification: 03.08.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ dDIN2/20	**Course name:** Didaktika informatiky 2

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	B	C	D	E	FX
66.67	33.33	0.0	0.0	0.0	0.0

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

Date of last modification: 03.08.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ ZSPdps/19	**Course name:** Essentials of Special Education

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: 76

A	B	C	D	E	FX
44.74	18.42	10.53	15.79	7.89	2.63

Provides: PaedDr. Michal Novocký, PhD., doc. PaedDr. Renáta Orosová, PhD.

Date of last modification: 22.09.2025

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/ ZMPPVdps/15	**Course name:** Introduction to Research Methodology in Education and Psychology

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 assessment
Total number of assessed students: 112

A	B	C	D	E	FX
66.96	19.64	9.82	1.79	1.79	0.0

Provides: doc. Mgr. Mária Bačíková, PhD.

Date of last modification: 24.06.2022

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ dMRUa/24	**Course name:** Mathematical problem solving strategies I

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: 110

A	B	C	D	E	FX
7.27	8.18	17.27	23.64	32.73	10.91

Provides: prof. RNDr. Jozef Doboš, CSc.

Date of last modification: 29.02.2024

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ dMRUb/24	**Course name:** Mathematical problem solving strategies II

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: 84

A	B	C	D	E	FX
28.57	28.57	26.19	8.33	8.33	0.0

Provides: doc. RNDr. Ingrid Semanišinová, PhD.

Date of last modification: 29.02.2024

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ dMRUc/24	**Course name:** Mathematical problem solving strategies III

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: ÚMV/dMRUb/24

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 63

A	B	C	D	E	FX
34.92	28.57	20.63	14.29	1.59	0.0

Provides: doc. RNDr. Stanislav Lukáč, PhD.

Date of last modification: 29.02.2024

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚFV/ dMFDF/20	**Course name:** Moderná fyzika z pohľadu didaktiky fyziky

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: 12

A	B	C	D	E	FX
33.33	33.33	16.67	8.33	8.33	0.0

Provides: doc. RNDr. Jozef Hanč, PhD.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ dNTVG/20	**Course name:** Nové trendy vo vyučovaní geografie
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

A	B	C	D	E	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:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ PPdps/20	**Course name:** Pedagogická prax
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:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment

Total number of assessed students: 4

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ PPdps/20	**Course name:** Pedagogická prax
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:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment

Total number of assessed students: 11

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ PPdps/20	**Course name:** Pedagogická prax

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. Ľubomír Šnajder, PhD.

Date of last modification: 04.08.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ PPdps/20	**Course name:** Pedagogická prax
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:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment

Total number of assessed students: 9

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ PPdps/20	**Course name:** Pedagogická prax
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:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 0	

abs	n
0.0	0.0

Provides:
Date of last modification:
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚFV/ dPSP/20	**Course name:** Praktikum školských pokusov

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: 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: 9

A	B	C	D	E	FX
88.89	11.11	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Zuzana Ješková, PhD.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPPaPZ/EPUdps/15	**Course name:** Professional Ethics for Teachers and School Counsellors

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: 95

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:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPPaPZ/ PPgUdps/15	**Course name:** Psychology and Educational Psychology

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: 116

A	B	C	D	E	FX
10.34	25.0	25.86	20.69	16.38	1.72

Provides: PhDr. Anna Janovská, PhD., prof. PhDr. Oľga Orosová, CSc.

Date of last modification: 14.09.2024

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚGE/ dRG1/20	**Course name:** Regionálna geografia I

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

A	B	C	D	E	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:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚGE/ dRG2/20	**Course name:** Regionálna geografia II

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: 0

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

Provides: doc. Mgr. Ladislav Novotný, PhD.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ dSZP/20	**Course name:** Seminár k záverečnej práci
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:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment

Total number of assessed students: 8

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚCHV/ dSZP/20	**Course name:** Seminár k záverečnej práci
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:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 9

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ dSZP/20	**Course name:** Seminár k záverečnej práci

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. Ľubomír Šnajder, PhD.

Date of last modification: 04.08.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ dSZP/20	**Course name:** Seminár k záverečnej práci
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:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	
Course assessment Total number of assessed students: 0	
abs	n
0.0	0.0
Provides:	
Date of last modification:	
Approved:	

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚBEV/ dSZP/20	**Course name:** Seminár k záverečnej práci
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:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment

Total number of assessed students: 2

abs	n
100.0	0.0

Provides:
Date of last modification:
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/ PDUdps/15	**Course name:** Teaching Methodology and Pedagogy

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: 114

A	B	C	D	E	FX
32.46	30.7	14.91	13.16	8.77	0.0

Provides: doc. PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Vagaská, PhD.

Date of last modification: 22.09.2025

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ dPDP/24	**Course name:** Teaching practice
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:	
Learning outcomes:	
Brief outline of the course:	
Recommended literature:	
Course language:	
Notes:	

Course assessment
Total number of assessed students: 3

abs	n
100.0	0.0

Provides: doc. RNDr. Ingrid Semanišinová, PhD.
Date of last modification:
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: KPPaPZ/UPRdps/15	**Course name:** The Art of Aiding by Verbal Exchange

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.

Recommended literature:

Course language:

Notes:

Course assessment
Total number of assessed students: 88

A	B	C	D	E	FX
60.23	17.05	17.05	1.14	4.55	0.0

Provides: Mgr. Ondrej Kalina, PhD.

Date of last modification: 12.09.2025

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚMV/ dZPO/24	**Course name:** Thesis defence

Course type, scope and the method:
Course type:
Recommended course-load (hours):
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: 46

A	B	C	D	E	FX
36.96	36.96	10.87	10.87	4.35	0.0

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚMV/ dZVP/24	**Course name:** Thesis project
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: 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: 1

abs	n
100.0	0.0

Provides:
Date of last modification: 29.02.2024
Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚFV/ ZPOdps/20	**Course name:** Záverečná práca a jej obhajoba

Course type, scope and the method:
Course type:
Recommended course-load (hours):
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: 6

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

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ ZPOdps/20	**Course name:** Záverečná práca a jej obhajoba

Course type, scope and the method:
Course type:
Recommended course-load (hours):
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: 3

A	B	C	D	E	FX
66.67	0.0	33.33	0.0	0.0	0.0

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚGE/ ZPOdps/20	**Course name:** Záverečná práca a jej obhajoba

Course type, scope and the method:
Course type:
Recommended course-load (hours):
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: 0

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

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ ZPOdps/20	**Course name:** Záverečná práca a jej obhajoba

Course type, scope and the method:
Course type:
Recommended course-load (hours):
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: 8

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

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ZPOdps/20	**Course name:** Záverečná práca a jej obhajoba

Course type, scope and the method:
Course type:
Recommended course-load (hours):
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: 3

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

Provides:

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ dSPP/20	**Course name:** Školské pokusy a pozorovania

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: 4

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

Provides: PaedDr. Andrea Lešková, PhD.

Date of last modification: 27.02.2026

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚFV/ dSPL/20	**Course name:** Školské počítačom podporované laboratórium

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

A	B	C	D	E	FX
77.78	22.22	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Zuzana Ješková, PhD.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ dSPP1/20	**Course name:** Školské programovacie prostredia 1

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/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.

Notes:

Course assessment
Total number of assessed students: 1

abs	n
100.0	0.0

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

Date of last modification: 30.08.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice	
Faculty: Faculty of Science	
Course ID: ÚINF/ dSPP2/20	**Course name:** Školské programovacie prostredia 2

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	B	C	D	E	FX
100.0	0.0	0.0	0.0	0.0	0.0

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

Date of last modification: 03.08.2021

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ dSPSP1/20	**Course name:** Špeciálne praktikum školských pokusov I

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: 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: 15

A	B	C	D	E	FX
93.33	6.67	0.0	0.0	0.0	0.0

Provides: RNDr. Ivana Sotáková, Ph.D.

Date of last modification:

Approved:

COURSE INFORMATION LETTER

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ dSPSP2/20	**Course name:** Špeciálne praktikum školských pokusov II

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: 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: 7

A	B	C	D	E	FX
85.71	14.29	0.0	0.0	0.0	0.0

Provides: RNDr. Jana Špaková Raschmanová, PhD.

Date of last modification:

Approved: