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## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> CJP/ PFAJAKA/07	<b>Course name:</b> Academic English									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> combined, present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> I., II., N										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b> Active classroom participation, 2 absences tolerated (4x45 min.) tolerated. 2 tests (5th/6th week and 12th/13th week), no retake. Minipresentation on chosen topic. Final evaluation- average assessment of tests and presentation. Grading scale: A 93-100%, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64% and less										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b> Seal B.: Academic Encounters, CUP, 2002 T. Armer :Cambridge English for Scientists, CUP 2011 M. McCarthy M., O'Dell F. - Academic Vocabulary in Use, CUP 2008 Zemach, D.E, Rumisek, L.A: Academic Writing, Macmillan 2005 Olsen, A. : Active Vocabulary, Pearson, 2013 <a href="http://www.bbclearningenglish.com">www.bbclearningenglish.com</a> Cambridge Academic Content Dictionary, CUP, 2009										
<b>Course language:</b> English language, level B2 according to CEFR.										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 355										
A	B	C	D	E	FX					
31.55	23.1	15.77	10.7	7.04	11.83					
<b>Provides:</b> PaedDr. Gabriela Bednáriková										
<b>Date of last modification:</b> 04.10.2019										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
AFV/15      **Course name:** Activating forms of biology teaching

**Course type, scope and the method:**

**Course type:** Practice

**Recommended course-load (hours):**

**Per week:** 2 **Per study period:** 28

**Course method:** present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:** 3.

**Course level:** II.

**Prerequisites:** ÚBEV/DIB1/03

**Conditions for course completion:**

Colloquium - presentation of seminar work.

**Learning outcomes:**

Extension skills of new teaching methods and selected practical activities.

**Brief outline of the course:**

Teacher and student - partners in learning. The development of science skills through IBSE (Inquiry based science education). New approaches to formative and summative assessment in IBSE. New educational technologies supporting IBSE. Different ways of working with text when learning biology. Project management and cooperative methods for biology lessons. Presentation of seminar work.

**Recommended literature:**

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

Kireš, M. [et al.]. Bádateľské aktivity v prírodovednom vzdelávaní [Inquiry activities in science education] časť A . - 1. vyd. - Bratislava : Štátny pedagogický ústav, 2016. - 128 s. - Projekt: Establish 244749 ; Sails 2890085. - ISBN 9788081181559

Standards and biology textbooks for Slovak lower and upper secondary schools (ISCED 2, ISCED 3)

Study materials of the internal course published in Moodle <https://lms.upjs.sk/login/index.php>

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 10

A	B	C	D	E	FX
50.0	20.0	30.0	0.0	0.0	0.0

**Provides:** doc. RNDr. Katarína Kimáková, CSc., Mgr. Veronika Tomková

**Date of last modification:** 20.02.2020

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚINF/  
AOS1/15      **Course name:** Administration of OS

**Course type, scope and the method:**

**Course type:** Practice

**Recommended course-load (hours):**

**Per week:** 2 **Per study period:** 28

**Course method:** present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:** 1., 3.

**Course level:** I., II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

To be able to install Linux based system, divide disks, to know how to install, configure and manage several network deamons.

**Brief outline of the course:**

1. Introduction to network services
2. SSH
3. Routing and NAT
4. Introduction to Firewall
5. Advanced firewall settings
6. DHCP server
7. Web server (apache, php, mysql)
8. Monitoring Server (SNMP, MRTG)
9. Samba Server
10. Mail server (smtp, imap, postfix)
11. Proxy server
12. Windows server
13. Windows Server II.
14. Introduction to Virtualization (Hyper-V OpenVZ)

**Recommended literature:**

1. Linux Documentation Project, 4 updated edition. Brno: Computer Press (2008).
2. Stanek, W.: Windows Server 2012 Inside Out. Microsoft Press (2013)
3. Shah, S. Soyinka, W. Administration Linux. Grade (2007)
4. Nemeth, E., et al.: Linux. Brno: Computer Press (2008)

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 88

A	B	C	D	E	FX
51.14	23.86	6.82	4.55	7.95	5.68

**Provides:** RNDr. JUDr. Pavol Sokol, PhD., RNDr. PhDr. Peter Pisarčík**Date of last modification:** 17.09.2015**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ BDB/15	<b>Course name:</b> Biology and Didactics of Biology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b>										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> Per study period:										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 1										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> II.										
<b>Prerequisites:</b> ÚBEV/MKVU/15 and ÚBEV/VEK1/03 and ÚBEV/DIB1/03										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 80										
A	B	C	D	E	FX					
32.5	37.5	21.25	8.75	0.0	0.0					
<b>Provides:</b>										
<b>Date of last modification:</b> 24.04.2018										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ BDB/14	<b>Course name:</b> Biology and Didactics of Biology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b>										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> Per study period:										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 1										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> II.										
<b>Prerequisites:</b> ÚBEV/DIB1/03 and (ÚBEV/FG1/03 or ÚBEV/ZOG1/03) and (ÚBEV/ZOM/04 or ÚBEV/ZO1/04 or ÚBEV/ZOO1/11 or ÚBEV/BO1/03 or ÚBEV/BOT1/03)										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 114										
A	B	C	D	E	FX					
21.93	31.58	27.19	14.04	5.26	0.0					
<b>Provides:</b>										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
BO1/03      **Course name:** Botany I

**Course type, scope and the method:**

**Course type:** Lecture / Practice

**Recommended course-load (hours):**

**Per week:** 2 / 2 **Per study period:** 28 / 28

**Course method:** present

**Number of ECTS credits:** 5

**Recommended semester/trimester of the course:** 1.

**Course level:** I., II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

Introduction to biology of lower plants.

**Brief outline of the course:**

Morphology, cytology, ecology, evolution and taxonomy of all main groups of lower plants. Cyanobacteria and algae (Cyanophyta, Prochlorophyta, Glaucophyta, Rhodophyta, Heterocontophyta, Haptophyta, Cryptophyta, Dinophyta, Euglenophyta, Chlorarachniophyta, Chlorophyta). Slime moulds (Plasmodiophoromycota, Dictyosteliomycota, Acrasiomycota, Labyrinthulomycota). Fungi (Oomycota, Hyphochytriomycota, Chytridiomycota, Zygomycota, Ascomycota, Basidiomycota). Lichens. Bryophytes.

Literature:

Deacon, J.W. (1998) Modern Mycology. Blackwell Science Ltd.

**Recommended literature:**

Bačkor, M.: Základy systému nižších rastlín I. (sinice, riasy a slizovky). UPJŠ, Košice 2002;

Deacon, J.W. (1998) Modern Mycology. Blackwell Science Ltd.

Van den Hoek, C. a kol. 1995: Algae, an introduction to phycology,

Záhorovská E. a kol.: Systém a evolúcia nižších rastlín. UK Bratislava 1998

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 1700

A	B	C	D	E	FX
13.71	19.47	25.53	19.82	18.88	2.59

**Provides:** prof. RNDr. Martin Bačkor, DrSc., RNDr. Michal Goga, PhD.

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
BOT1/03      **Course name:** Botany II

**Course type, scope and the method:**

**Course type:** Lecture / Practice

**Recommended course-load (hours):**

**Per week:** 2 / 2 **Per study period:** 28 / 28

**Course method:** present

**Number of ECTS credits:** 5

**Recommended semester/trimester of the course:** 2.

**Course level:** I., II.

**Prerequisites:**

**Conditions for course completion:**

Practical and theoretical exam.

**Learning outcomes:**

To obtain of survey in knowledge and methods in systematics of tracheophytes.

**Brief outline of the course:**

History and present time of plant systematics. Approaches to plant classification. Principles of cladistics and molecular taxonomy. Tracheophytes, clades of lycophytes, ferns and allies. Seed plants. Gymnosperms and their evolution: cycads, ginkgos, conifers, gnetophytes. Angiosperms. Evolution and general description. Basal clades and Magnoliid clade. Monocots. "Basal tricolpates" and Caryophyllid clade. Rosid and asterid clades of tricolpates.

Practices are devoted to study of the most important families of tracheophytes. Fossil evidence of ferns and allies from Palaeozoic age. Tropical a subtropical flora. Ferns. Practical study of conifers. Selected families of angiosperms. (<i>Magnoliaceae, Araceae, Liliaceae, Amaryllidaceae, Cyperaceae, Poaceae, Ranunculaceae, Papaveraceae, Caryophyllaceae, Euphorbiaceae, Violaceae, Fabaceae, Rosaceae, Betulaceae, Brassicaceae, Boraginaceae, Plantaginaceae, Lamiaceae, Apiaceae, Asteraceae</i>). Study of other seed plants, plant identification according to key.

**Recommended literature:**

Mártonfi P.: Systematika cievnatých rastlín, 2. vydanie. - ES UPJŠ, Košice, 2006.

Mártonfi P.: Systematika cievnatých rastlín. - ES UPJŠ, Košice, 2003.

Judd W. S., Campbell Ch. S., Kellogg E. A. & Stevens P. F., Donoghue M. J.: Plant Systematics. A phylogenetic Approach, 2nd ed. - Sinauer Associates, Sunderland, 2002.

Dostál J., Červenka M.: Veľký kľúč na určovanie rastlín I. a II. - SPN, Bratislava, 1991 a 1992.

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 1453

A	B	C	D	E	FX
10.67	12.39	17.41	19.75	24.5	15.28

**Provides:** prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčík, PhD.**Date of last modification:** 03.05.2015**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPO/ SDaM/15	<b>Course name:</b> Child and Adolescent Sociology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 4.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 851										
A	B	C	D	E	FX					
49.71	29.85	15.39	3.41	1.29	0.35					
<b>Provides:</b> Mgr. Alexander Onufrák, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** KPE/  
MT/09      **Course name:** Class Management

**Course type, scope and the method:**

**Course type:** Practice

**Recommended course-load (hours):**

**Per week:** 2 **Per study period:** 28

**Course method:** present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:** 2.

**Course level:** II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 499

A	B	C	D	E	FX
53.91	33.87	9.02	1.6	0.6	1.0

**Provides:** PaedDr. Renáta Orosová, PhD.

**Date of last modification:** 11.02.2020

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ KKV1/15	<b>Course name:</b> Classical and quantum computations
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 1 <b>Per study period:</b> 42 / 14 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 6	
<b>Recommended semester/trimester of the course:</b> 1., 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Written work Written and oral examination	
<b>Learning outcomes:</b> To provide information on quantum computer and quantum computations. To compare classical and quantum models and methods.	
<b>Brief outline of the course:</b> The basics of classical theory of computation: Turing machines, Boolean circuits, parallel algorithms, probabilistic computation, NP-complete problems, and the idea of complexity of an algorithm. Introduction of general quantum formalism (pure states, density matrices, and superoperators), universal gate sets and approximation theorems. Grover's algorithm, Shor's factoring algorithm, and the Abelian hidden subgroup problem. Parallel quantum computation, a quantum analogue of NP-completeness, and quantum error-correcting codes.	
<b>Recommended literature:</b> 1. BERMAN,G.P., DOOLEN,G.D., MAINIERI, R., TSIFRINOVIC, V.I. Introduction to Quantum Computers. World Scientific, 2003. 2. GRUSKA, J. Quantum Computing. McGraw-Hill, 1999. 3. JOHNSON, G. A Shortcut Through Time: The Path to the Quantum Computer, Knopf 2003. 4. KITAEV, A.Y., SHEN, A.H., VYALYI, M.N. Classical and Quantum Computation. American Mathematical Society, 2002. 5. NIELSEN, M.A., CHUANG, I.L. Quantum Computation and Quantum Information. Cambridge University Press, 2000. 6. HIRVENSALO, M., Quantum Computing, Springer 2004	
<b>Course language:</b>	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 128

A	B	C	D	E	FX
22.66	35.94	14.84	13.28	7.03	6.25

**Provides:** prof. RNDr. Gabriel Semanišin, PhD., RNDr. Zuzana Bednárová, PhD.**Date of last modification:** 03.05.2015**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** CJP/  
PFAJKKA/07

**Course name:** Communicative Competence in English

**Course type, scope and the method:**

**Course type:** Practice

**Recommended course-load (hours):**

**Per week:** 2 **Per study period:** 28

**Course method:** combined, present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:**

**Course level:** I., II., N

**Prerequisites:**

**Conditions for course completion:**

Active participation in class and completed homework assignments. Students are allowed to miss two classes at the most.

2 credit tests (presumably in weeks 6/7 and 12/13) and short academic presentations in English on selected topics.

Final grade will be calculated as follows: A 93-100 %, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64 % and less.

**Learning outcomes:**

Uplatnenie a aktívne používanie svojich teoretických vedomostí v praktických komunikačných situáciách. Zdokonalenie jazykových vedomostí a zručností študenta, rečovej, pragmatickej a vecnej kompetencie, predovšetkým zlepšujú komunikáciu, schopnosť prijímať a formulovať výpovede, efektívne vyjadrovať svoje myšlienky ako aj orientovať sa v obsahovom pláne výpovede. Precvičovanie rečových intencií kontaktných (napr. pozdravy, oslovenia, pozvanie, oslovenie), informatívnych (napr. získavanie a podávanie informácií, vyjadrenie priestorových a časových vzťahov), regulačných (napr. prosba, podávanie, zakaz, pochvala, súhlas, nesúhlas) a hodnotiacich (napr. vyjadrenie vlastného názoru, stanoviska, želania, emócií). Výsledkom budovania praktickej jazykovej kompetencie majú byť vedomosti a zručnosti zodpovedajúce požiadavkám a kritériám dokumentu Spoločný európsky referenčný rámec pre vyučovanie jazykov.

**Brief outline of the course:**

Rodina, jej formy a problémy

Vyjadrovanie pocitov a dojmov

Dom, bývanie a budúcnosť

Formy a dialekty v anglickom jazyku

Život v meste a na vidieku

Kolokácie a idiomy, zaužívané slovné spojenia

Prázdny a sviatky vo svete

Životné prostredie a ekológia

Výnimky zo slovosledu

Frázové slovesá a ich použitie

Charakteristiky neformálneho diškurzu

**Recommended literature:**

www.bbclearningenglish.com

McCarthy M., O'Dell F.: English Vocabulary in Use, Upper-Intermediate. CUP, 1994.

Misztal M.: Thematic Vocabulary. SPN, 1998.

Fictumova J., Ceccarelli J., Long T.: Angličtina, konverzace pro pokročilé. Barrister and Principal, 2008.

Peters S., Gráf T.: Time to practise. Polyglot, 2007.

Jones L.: Communicative Grammar Practice. CUP, 1985.

Alexander L.G.: Longman English Grammar. Longman, 1988.

**Course language:**

English language, B2 level according to CEFR

**Notes:****Course assessment**

Total number of assessed students: 237

A	B	C	D	E	FX
38.4	22.36	19.41	9.7	6.75	3.38

**Provides:** Mgr. Barbara Mitríková

**Date of last modification:** 11.02.2020

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KGER/ NJKK/07	<b>Course name:</b> Communicative Competence in German Language									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
Per week: 2 Per study period: 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 44										
A	B	C	D	E	FX					
59.09	13.64	6.82	4.55	13.64	2.27					
<b>Provides:</b> Mgr. Eva Černáková, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> CJP/ PFAJGA/07	<b>Course name:</b> Communicative Grammar in English				
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> combined, present					
<b>Number of ECTS credits:</b> 2					
<b>Recommended semester/trimester of the course:</b>					
<b>Course level:</b> I., II., N					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Active classroom participation (max. 2x90 min. absences tolerated). 2 test (5th/6th and 12/13th week), no retake. Final evaluation- average assessment of tests. Grading scale: A 93-100%, B 86-92%, C 79-85%, D 72-78%, E 65-71%, FX 64% and less.					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b> Vince M.: Macmillan Grammar in Context, Macmillan, 2008 McCarthy, O'Dell: English Vocabulary in Use, CUP, 1994 C. Oxengen, C. Latham-Koenig: New English File Advanced, Oxford 2010 Misztal M.: Thematic Vocabulary, Fragment, 1998 <a href="http://www.bbclearningenglish.com">www.bbclearningenglish.com</a> <a href="http://ted.com/talks">ted.com/talks</a>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 406					
A	B	C	D	E	FX
39.66	18.97	16.75	8.62	5.91	10.1
<b>Provides:</b> PaedDr. Gabriela Bednáriková					
<b>Date of last modification:</b> 14.09.2019					
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KGER/ NJKG/07	<b>Course name:</b> Communicative Grammar in German Language									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 50										
A	B	C	D	E	FX					
56.0	12.0	10.0	4.0	10.0	8.0					
<b>Provides:</b> PaedDr. Ingrid Puchalová, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ MPPc/15	<b>Course name:</b> Continuous practice teaching I
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 4t <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚBEV/MPPb/15	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 169	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ MPPc/15	<b>Course name:</b> Continuous practice teaching I
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 4t <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚINF/MPPb/15	
<b>Conditions for course completion:</b> A certified statement of classroom visits and own taught lessons as proof of a practice within the range prescribed 6 hours classroom visits and 18 taught computer science lessons. Observation records and lesson preparations.	
<b>Learning outcomes:</b> The student under supervision of an experienced teacher trainer teaching practical skills for computer science teaching. Student is familiar with the life of the school, extra-curricular and other activities.	
<b>Brief outline of the course:</b> Observations of teacher trainer lessons, consultations of lesson preparations of students, teaching aids, teaching own lessons, methodological and scientific analysis of lessons, active participation in extracurricular and other activities of training school.	
<b>Recommended literature:</b> Current computer science textbooks for primary and secondary schools in Slovakia.	
<b>Course language:</b> Slovak	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 12	
abs	n
100.0	0.0
<b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ MPPd/15	<b>Course name:</b> Continuous practice teaching II
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 6t <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚINF/MPPc/15	
<b>Conditions for course completion:</b> A certified statement of classroom visits and own taught lessons as proof of a practice within the range prescribed 8 hours classroom visits and 30 taught computer science lessons. Observation records and lesson preparations.	
<b>Learning outcomes:</b> The student under supervision of an experienced teacher trainer teaching practical skills for computer science teaching. Student is familiar with the life of the school, extra-curricular and other activities.	
<b>Brief outline of the course:</b> Observations of teacher trainer lessons, consultations of lesson preparations of students, teaching aids, teaching own lessons, methodological and scientific analysis of lessons, active participation in extracurricular and other activities of training school.	
<b>Recommended literature:</b> Current computer science textbooks for primary and secondary schools in Slovakia.	
<b>Course language:</b> Slovak	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 9	
abs	n
100.0	0.0
<b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ MPPd/15	<b>Course name:</b> Continuous practice teaching II
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 6t <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚBEV/MPPc/15	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 144	
abs	n
100.0	0.0
<b>Provides:</b> PaedDr. Andrea Lešková, PhD.	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPE/ TTUP/15	<b>Course name:</b> Creating Text Teaching Aids									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 2.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 139										
A	B	C	D	E	FX					
53.24	30.94	10.07	4.32	1.44	0.0					
<b>Provides:</b> PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Boberová, PhD.										
<b>Date of last modification:</b> 12.02.2020										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚINF/ KRS/15	<b>Course name:</b> Cryptographic systems and their applications									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 2 <b>Per study period:</b> 42 / 28 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 6										
<b>Recommended semester/trimester of the course:</b> 1.										
<b>Course level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 106										
A	B	C	D	E	FX					
13.21	9.43	12.26	12.26	33.96	18.87					
<b>Provides:</b> doc. RNDr. Stanislav Krajčí, PhD., RNDr. Rastislav Krivoš-Belluš, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KSSFaK/ KJPUAP/15	<b>Course name:</b> Culture of Spoken Discourse									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture / Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 1 / 1 <b>Per study period:</b> 14 / 14										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 1.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 0										
A	B	C	D	E	FX					
0.0	0.0	0.0	0.0	0.0	0.0					
<b>Provides:</b> PhDr. Iveta Bónová, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚINF/  
ODPU/15      **Course name:** Defence of diploma thesis

**Course type, scope and the method:**

**Course type:**

**Recommended course-load (hours):**

**Per week:** Per study period:

**Course method:** present

**Number of ECTS credits:** 15

**Recommended semester/trimester of the course:**

**Course level:** II.

**Prerequisites:** ÚINF/DSU1b/15

**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
50.0	0.0	50.0	0.0	0.0	0.0

**Provides:**

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚINF/  
TSM1a/15

**Course name:** Development and processing of multimedia

**Course type, scope and the method:**

**Course type:** Practice

**Recommended course-load (hours):**

**Per week:** 2 **Per study period:** 28

**Course method:** present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:** 1., 3.

**Course level:** II.

**Prerequisites:**

**Conditions for course completion:**

Assessment of preliminary assignments - static images, animations, sounds, videos.

Assessment of the final multimedia project for the selected topic of computer science.

**Learning outcomes:**

To acquire basic principles about multimedia and procedures for the creation and processing of multimedia (still images, animation, audio, video).

**Brief outline of the course:**

Principles of creation and processing of computer graphics, audio and video by the help of selected multimedia editors (LogoMotion, Pixlr, Go Animate, Diagramly, InkScape, Audacity, Anvil Studio, Magix Music Maker, CamStudio, Windows Movie Maker, FormatFactory).

**Recommended literature:**

1. LACHS, V. Making Multimedia in the Classroom. London : RoutledgeFalemer, 2000. ISBN 0415216842.
2. GÖBEL, S. et al. Technologies for Interactive Digital Storytelling and Entertainment (LNCS 4326). Darmstadt : Springer, 2006. ISBN 3540499342.
3. ADÁMEK, R. et al. Moderná didaktická technika v práci učiteľa. Elfa, s.r.o., Košice. 2010. ISBN 978-80-8086-135-3.
4. CHALUPA, R. Fotografie, hudba a video ve Windows XP. 2005. ISBN 8072269313.

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 11

A	B	C	D	E	FX
27.27	27.27	18.18	9.09	9.09	9.09

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

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚINF/ TSM1b/15	<b>Course name:</b> Development and processing of multimedia				
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 2., 4.					
<b>Course level:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Evaluation of particular assignments. 100% / 0% Project containing programmed multimedia.					
<b>Learning outcomes:</b> Program design and multimedia applications. Understand the basic principles and procedures for multimedia programming.					
<b>Brief outline of the course:</b> Principles of Programming bitmap graphics, bitmap animation, vector graphics, vector animation, audio and video.					
<b>Recommended literature:</b> DUNN, J. R. Digitální video. 2003. ISBN 8025100383. Audacity: Programování v Conquista. [online] Dostupné na internete: < <a href="http://audacity.sourceforge.net/help/nyquist2">http://audacity.sourceforge.net/help/nyquist2</a> >. ARMSTRONG, J., DEHAAN, J. Macromedia Flash 8 - výukový průvodce. 2006. ISBN 8025103358.					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 5					
A	B	C	D	E	FX
20.0	60.0	20.0	0.0	0.0	0.0
<b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
DIB1/03      **Course name:** Didactics of biology

**Course type, scope and the method:**

**Course type:** Lecture / Practice

**Recommended course-load (hours):**

**Per week:** 2 / 3 **Per study period:** 28 / 42

**Course method:** present

**Number of ECTS credits:** 6

**Recommended semester/trimester of the course:** 2.

**Course level:** II.

**Prerequisites:** KPPaPZ/PPgU/15 or KPE/DPP/14 or KPE/PDU/15

**Conditions for course completion:**

Continuous assessment of tasks, which students prepared and submitted.

Oral exam. 2020 written exam on-line

**Learning outcomes:**

Meet specific subjects teaching biology in high school and an elementary school. Learn and apply didactic knowledges in the topics of the biology curriculum with respect of psychological principles of learning. Selected biology teaching methods and technologies.

**Brief outline of the course:**

- The aims of biological education in Slovakia, basic documents.
- Analysis of the curriculum and the formulation of educational objectives.
- EUR framework, phases of learning.
- Teaching strategies and methods in biology teaching.
- Concept learning.
- Problem solving and higher-order questions.
- Inquiry based science education.
- The importance of reflection.
- Verification of biological knowledge and skills. Assessment and classification.
- Educational aspects of biology teaching, development of critical thinking skills and key competences.
- Teaching aids for biology, the role of ICT.
- The school garden.
- History of biology teaching. Various concepts of biology teaching abroad.

**Recommended literature:**

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

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

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

Existing curriculum standards and biology textbooks for elementary and secondary schools

Fiser, R.: Učíme deti myset a učit se. Praha: Portál, 2011. 176 s. ISBN 978-80262-0043-7

Gavora, P.: Akí sú moji žiaci. (Pedagogická diagnostika žiaka). Nitra: ENIGMA, 2011. 216 s.  
ISBN 978-80-89132-91-1

Karnsová, M.: Jak budovat dobrý vztah mezi učitelem a žákem. Praha: Portál, 1995. 151 s. ISBN  
80-7178-032-4

Kotrba, T., Lacina, L.: Praktické využití aktivizačných metod ve výuce. Brno: Společnost pro  
odbornou literaturu, 2007. 188 s. ISBN 978-80-87029-12-1

Kyriacou, Ch.: Klíčové dovednosti učitele. Praha: Portál, 1996. 153 s. ISBN 80-7178-022-7

Petty, G.: Moderní vyučování. Praha: Portál, 2013. 380 s. ISBN 80-7178-070-7

Silberman, M.: 101 Metod pre aktivní výcvik a vyučování. Praha: Portál, 1997. 312 s. ISBN:  
80-7178-124-X

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 549

A	B	C	D	E	FX
49.18	29.87	16.76	4.19	0.0	0.0

**Provides:** doc. RNDr. Katarína Kimáková, CSc., RNDr. Ivana Slepáková, PhD., PaedDr. Andrea Lešková, PhD.

**Date of last modification:** 27.03.2020

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ DIN1a/15	<b>Course name:</b> Didactics of informatics
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 <b>Per study period:</b> 42 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 3	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Computer science teaching plan at secondary grammar school. Conceptual map and cognitive objectives of chosen computer science topic. Collection of tasks with increasing complexity for chosen topic. Teaching preparation for 5E inquiry-based lesson for selected topic.	
<b>Learning outcomes:</b> 1. To acquire an overview of the objectives, content, modern methods of teaching computer science. 2. To create conceptual map, cognitive objectives and tasks collection with increasing complexity for chosen topic. 3. To create a inquiry-oriented methodology of teaching a chosen topic. 4. To solve selected algorithmic problems using various problem solving strategies.	
<b>Brief outline of the course:</b> The objectives and content of computer science education. Teaching task, its forms and parameters. Creation of tasks collection with increasing complexity. Activating methods of teaching computer science. Inquiry-based computer science education. Methodology of teaching selected topics of computer science. Solving algorithmic problems exploiting various strategies.	
<b>Recommended literature:</b> 1. HAZZAN, Orit - LAPIDOT, Tami - RAGONIS, Noa (2011). Guide to teaching computer science : an activity-based approach. London ; New York : Springer, ©2011. ISBN 978-0-85729-443-2. 2. BELL, Tim - MORGAN, Jack (2014). Computer Science Field Guide. University of Canterbury, New Zealand. <a href="http://www.cosc.canterbury.ac.nz/csfieldguide/index.html">http://www.cosc.canterbury.ac.nz/csfieldguide/index.html</a> 3. BELL, Tim - WITTEN, Ian H. - FELLOWS, Mike (2005). Computer Science Unplugged: An enrichment and extension programme for primary-aged children. Computer Science Unplugged. 2005. <a href="http://ir.canterbury.ac.nz/bitstream/10092/247/1/12584508_Main.pdf">http://ir.canterbury.ac.nz/bitstream/10092/247/1/12584508_Main.pdf</a> 4. KALAŠ, Ivan et al. (2001). Informatika pre stredné školy, Bratislava : SPN, 2001. ISBN 80-10-00157-0. 5. GUNIŠ, Ján - SUDOLSKÁ, Miloslava - ŠNAJDER, Ľubomír (2009). Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika - Aktivizujúce metódy vo vyučbe školskej informatiky. 2009. ISBN 978-80-89225-96-5.	

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 68

A	B	C	D	E	FX
27.94	16.18	22.06	20.59	11.76	1.47

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

**Date of last modification:** 01.04.2020

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚINF/  
DIN1b/15      **Course name:** Didactics of informatics

**Course type, scope and the method:**

**Course type:** Lecture / Practice

**Recommended course-load (hours):**

**Per week:** 2 / 2 **Per study period:** 28 / 28

**Course method:** present

**Number of ECTS credits:** 5

**Recommended semester/trimester of the course:** 3.

**Course level:** II.

**Prerequisites:**

**Conditions for course completion:**

The preliminary assessment shall be based on the results of independent work of student on computers for a number of sub-assignments (course and evaluation of own inquiry activity, didactical quiz, interactive modelling applet, inquiry-based worksheet with tasks and questions). In final exam students will demonstrate an overview of the theoretical knowledge in the field of computer science education in written form and they will present and defend their own educational project for the chosen topic of the computer science (containing objectives, system of tasks with increasing complexity, tasks solutions and methodological commentaries and didactical quiz).

**Learning outcomes:**

1. For the chosen topic of school informatics create didactic quiz, inquiry-based worksheet with tasks and questions, implement and evaluate own inquiry activity.
2. To create an interactive model for the chosen natural phenomenon or computer science concept.
3. To create a lesson preparation using modern teaching methods and aids, to implement it in practice and evaluate.

**Brief outline of the course:**

Teaching paradigms. Inquiry based computer science education. Process of creating concepts in computer science. Assessment of learning objectives of pupils, didactical quizzes. Programming teaching (paradigms, environments, data types, commands, variables). Specifics of computer arithmetics. Mathematical modelling and simulation. Methodology of teaching selected topics of computer science (multimedia, internet). Computer science competitions.

**Recommended literature:**

1. HAZZAN, Orit - LAPIDOT, Tami - RAGONIS, Noa (2011). Guide to teaching computer science : an activity-based approach. London ; New York : Springer, ©2011. ISBN 978-0-85729-443-2.
2. BELL, Tim - MORGAN, Jack (2014) Computer Science Field Guide. University of Canterbury, New Zealand. <http://www.cosc.canterbury.ac.nz/csfieldguide/index.html>
3. SALANCI, Ľubomír - TOMCSÁNYIOVÁ, Monika - BLAHO, Andrej (2010). Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika : Didaktika programovania 2. Bratislava : Štátny pedagogický ústav, 2010. 36 s. ISBN 978-80-8118-053-8.

4. GUNIŠ, Ján - ŠNAJDER, Ľubomír (2009). Ďalšie vzdelávanie učiteľov základných škôl a stredných škôl v predmete informatika : Didaktika predmetu Informatika 2. Bratislava : Štátne pedagogický ústav, 2009. 45 s. ISBN 978-80-8118-021-7.

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 148

A	B	C	D	E	FX
16.89	33.78	24.32	16.22	8.11	0.68

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

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ DPP1/14	<b>Course name:</b> Diploma Project I
<b>Course type, scope and the method:</b>	
<b>Course type:</b>	
<b>Recommended course-load (hours):</b>	
<b>Per week:</b> Per study period:	
<b>Course method:</b> present	
<b>Number of ECTS credits:</b> 1	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b>	
Total number of assessed students: 86	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ DPP2/14	<b>Course name:</b> Diploma Project II
<b>Course type, scope and the method:</b>	
<b>Course type:</b>	
<b>Recommended course-load (hours):</b>	
<b>Per week:</b> Per study period:	
<b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚBEV/DPP1/14	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b>	
Total number of assessed students: 79	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ DPP3/14	<b>Course name:</b> Diploma Project III
<b>Course type, scope and the method:</b>	
<b>Course type:</b>	
<b>Recommended course-load (hours):</b>	
<b>Per week:</b> Per study period:	
<b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚBEV/DPP2/14	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b>	
Total number of assessed students: 90	
abs	n
100.0	0.0
<b>Provides:</b>	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ DPOU/14	<b>Course name:</b> Diploma Thesis and its Defence									
<b>Course type, scope and the method:</b>										
<b>Course type:</b>										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> Per study period:										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 15										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> II.										
<b>Prerequisites:</b> ÚBEV/DPP3/14										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 79										
A	B	C	D	E	FX					
46.84	35.44	12.66	2.53	1.27	1.27					
<b>Provides:</b>										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/PUDU/15	<b>Course name:</b> Drug Addiction Prevention in Educational Practice									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 4										
<b>Recommended semester/trimester of the course:</b> 1., 3.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 284										
A	B	C	D	E	FX					
48.59	42.96	7.75	0.7	0.0	0.0					
<b>Provides:</b> prof. PhDr. Ol'ga Orosová, CSc., Mgr. Marianna Berinšterová, PhD.										
<b>Date of last modification:</b> 06.09.2018										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/VP/09	<b>Course name:</b> Educational Counselling									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 2.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 148										
A	B	C	D	E	FX					
62.84	22.97	8.78	4.05	1.35	0.0					
<b>Provides:</b> PhDr. Anna Janovská, PhD.										
<b>Date of last modification:</b> 25.03.2020										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** KPE/  
ZSP/15

**Course name:** Essentials of Special Education

**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:** 2

**Recommended semester/trimester of the course:** 3.

**Course level:** II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 357

A	B	C	D	E	FX
48.46	29.97	14.85	5.32	1.4	0.0

**Provides:** Mgr. Peter Fudaly, PhD.

**Date of last modification:** 13.09.2019

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ ETO1/03	<b>Course name:</b> Ethology				
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<b>Course level:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Recognition. Written examination.					
<b>Learning outcomes:</b> To teach the students to know and to be aware of the importance of the behavioural aspect in biological sciences					
<b>Brief outline of the course:</b> History and development of ethology. Ethological methods. The innate forms of behaviour. The simplest forms of learning – conditioning and instrumental learning. Higher form of learning. Social behaviour. Sexual behaviour. Play behaviour. Biological rhythms. Orientation in space and animal migrations. Communication systems of animals. Emotions. Aggression in animal and human behaviour. Abnormal forms of behaviour					
<b>Recommended literature:</b> Franck, D.: Verhaltensbiologie. Einführung in die Ethologie. Georg Thieme-Verlag, 1993 Manning, A., Dawkins, M. S.: An introduction to animal behaviour. Cambridge University Press, 1992					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 972					
A	B	C	D	E	FX
39.71	24.9	25.31	8.23	1.75	0.1
<b>Provides:</b> RNDr. Igor Majláth, PhD.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPE/ ZZP/12	<b>Course name:</b> Experiential Education									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 2 <b>Per study period:</b> 14 / 28 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 4										
<b>Recommended semester/trimester of the course:</b> 1., 3.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 266										
A	B	C	D	E	FX					
41.35	40.98	15.41	2.26	0.0	0.0					
<b>Provides:</b> PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petriková, PhD.										
<b>Date of last modification:</b> 30.01.2020										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ TCZ/03	<b>Course name:</b> Fieldwork from zoology
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 5d <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b> Practical observation of morphology of vertebrates.	
<b>Brief outline of the course:</b> Systematic and phylogenetic relationships of vertebrate. Review of important groups of fishes, amphibians, reptiles, birds and mammals - observation, and laboratory work.	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 793	
abs	n
99.24	0.76
<b>Provides:</b> RNDr. Peter Ľuptáčik, PhD., doc. RNDr. Ľubomír Panigaj, CSc., RNDr. Andrej Mock, PhD.	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ TCB1/03	<b>Course name:</b> Fieldworks from Botany
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 5d <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b> Study of methods for identification and determination of common central-europaeian plants.	
<b>Brief outline of the course:</b> Plant identification in different habitats. Plant determination. Floristic records.	
<b>Recommended literature:</b> Dostál J., Červenka M.: Veľký kľúč na určovanie rastlín I. a II. - Veda, Bratislava 1991 a 1992. Kubát K. (ed.): Klíč ke květeně České republiky. - Academia, Praha, 2002. Marhold K. a Hindák F. (eds.): Zoznam nižších a vyšších rastlín Slovenska. Checklist of non-vascular and vascular plants of Slovakia. - Veda, Bratislava 1998. Krejča J. (ilustr.): Veľká kniha rastlín. - Bratislava (various editions).	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 1094	
abs	n
99.91	0.09
<b>Provides:</b> prof. RNDr. Pavol Mártonfi, PhD., prof. RNDr. Martin Bačkor, DrSc., Mgr. Vladislav Kolarčík, PhD.	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚINF/ FO1/15	<b>Course name:</b> Formal languages and automata									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture / Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b> 1., 3.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
To provide theoretical background for studying computer science in general, by giving the necessary knowledge in theory of automata.										
<b>Brief outline of the course:</b>										
Greibach normal structure of contextfree grammars. Deterministic pushdown automata. Context-sensitive grammars and linearly-bounded Turing machines. Deterministic linearly-bounded Turing machines. Space bounded machines. Phrase-structure grammars and Turing machines. Post correspondence problem. Undecidable problems in the theory of formal languages.										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 11										
A	B	C	D	E	FX					
36.36	36.36	18.18	9.09	0.0	0.0					
<b>Provides:</b> prof. RNDr. Viliam Geffert, DrSc., Mgr. Alexander Szabari, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
GEB/12      **Course name:** Geology and petrography

**Course type, scope and the method:**

**Course type:** Lecture / Practice

**Recommended course-load (hours):**

**Per week:** 3 / 2 **Per study period:** 42 / 28

**Course method:** present

**Number of ECTS credits:** 6

**Recommended semester/trimester of the course:** 2.

**Course level:** II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 851

A	B	C	D	E	FX
11.52	20.92	32.2	22.33	9.64	3.41

**Provides:** Ing. Katarína Bónová, PhD.

**Date of last modification:** 31.03.2020

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
IMU1/03      **Course name:** Immunology

**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:** 1., 3.

**Course level:** II.

**Prerequisites:**

**Conditions for course completion:**

Recognition.

Oral examination.

**Learning outcomes:**

This course introduces the students to the basic concepts of immunology as well as highlights the role and importance of immunology in various human diseases. The aim of Immunology lessons is the presentation of the organization and function of the immune system, as well as the comprehension of complex molecular and cellular interactions during the induction of immune responses.

**Brief outline of the course:**

Basic immunology: Lymphatic System Anatomy, The Innate Immune System, The Induced Responses of Innate Immunity, The Adaptive Immune Response, Antigens and Antibodies, Antigen Recognition by B-cell and T-cell Receptors, Antigen Presentation to T-lymphocytes, Complement, Clinical immunology: Allergy and other Hypersensitivities, Autoimmunity and Transplantation, Tumor Immunology, Disorders of The Immune System.

**Recommended literature:**

Janeway Ch. A., Travers P., Walport M., Schliomchik M.: Immunobiology. Garland Science, 2004

Murphy, K. (2012): Jeneway's Immunobiology. 8th ed. Garland Science

Delves, P.J. et al. (2011): Roitt's essential immunology 12th ed Wiley-Blackwell

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 903

A	B	C	D	E	FX
38.54	24.47	24.81	7.09	1.88	3.21

**Provides:** RNDr. Vlasta Demečková, PhD.

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚINF/ MSSUI/15	<b>Course name:</b> Informatika a didaktika informatiky									
<b>Course type, scope and the method:</b>										
<b>Course type:</b>										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> Per study period:										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 1										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> II.										
<b>Prerequisites:</b> ÚINF/DIN1b/15 and ÚINF/TIK1/15 and (ÚINF/UGR1/15 or ÚINF/KKV1/15 or ÚINF/UNS1/15 or ÚINF/FO1/15)										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 13										
A	B	C	D	E	FX					
38.46	23.08	23.08	7.69	7.69	0.0					
<b>Provides:</b>										
<b>Date of last modification:</b> 24.04.2017										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚINF/  
TIK1/15      **Course name:** Information theory, encoding

**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:** 1.

**Course level:** II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 80

A	B	C	D	E	FX
63.75	11.25	12.5	3.75	0.0	8.75

**Provides:** doc. RNDr. Stanislav Krajčí, PhD.

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ VIV1/15	<b>Course name:</b> Internet in education
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 2 <b>Per study period:</b> 14 / 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Assessment of preliminary assignments - design of a teleproject, design of an e-learning course lesson, design and implementation of a video-conference activity. In final exam students will demonstrate an overview of using the Internet in education in written form and they will present and defend their final work focused on using the Internet in education (design and implementation of an e-learning course, teleproject, webquest, on-line competition, lesson exploiting several Internet sources and tools).	
<b>Learning outcomes:</b> 1. To acquire an overview of the possibilities of using the Internet in education. 2. To enhance skills for searching, acquiring, exchanging and presenting information via the Internet. 3. To design, develop and verify an Internet activity (e-learning course, teleproject, WebQuest, online competition, video lecture).	
<b>Brief outline of the course:</b> Overview of using the Internet in education. Educational Web sites and search engines. Design, implementation and evaluation of e-learning courses. Educational teleprojects, online competitions, teleexperiments. Communicating via the Internet - forums, blogs, videoconferences, social networking. Social, medical, ethical and legal aspects of using the Internet.	
<b>Recommended literature:</b> 1. CONRAD, Rita-Marie - DONALDSON, J. Ana (2011). Engaging the Online Learner: Activities and Resources for Creative Instruction. Jossey-Bass; Updated Edition edition 2011. ISBN 978-1118018194. 2. FREEDMAN, Terry (2010) The Amazing Web 2.0 Projects Book. <a href="http://www.terry-freedman.org.uk/web2_2010/Amazing%20Web%202%20Projects%20online%20version.pdf">http://www.terry-freedman.org.uk/web2_2010/Amazing%20Web%202%20Projects%20online%20version.pdf</a> 3. MANN, B. L. Selected Styles in Web-based Educational Research. Information Science Pub, 2005. ISBN 15-9140-732-X. 4. BARANOVIČ, R. et al. Internet pre stredné školy - Učebnica Internetu. Praha : Computer Press, 2003. 275 s. ISBN 80-251-0088-X.	

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 150

A	B	C	D	E	FX
15.33	33.33	21.33	14.67	12.0	3.33

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

**Date of last modification:** 01.04.2020

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ VEK1/03	<b>Course name:</b> Introduction to Ecology				
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b> Fundamental parameters and relations in ecological science.					
<b>Brief outline of the course:</b> Ecological factors and relations in environment (air, water, soil); influence of ecological factors on individuals (morphological adaptations, behavioral reactions); populations and communities; ecosystems (impact assessment); conservation and biodiversity.					
<b>Recommended literature:</b> Begon, M., Harper, J. L., Townsend, C. L.: Ecology: individuals, populations, and communities. Blackwell Sci. Publ., 1990					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 1579					
A	B	C	D	E	FX
19.89	16.02	24.83	18.11	12.54	8.61
<b>Provides:</b> prof. RNDr. Igor Hudec, CSc.					
<b>Date of last modification:</b> 07.02.2019					
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚINF/  
UGR1/15

**Course name:** Introduction to computer graphics

**Course type, scope and the method:**

**Course type:** Lecture / Practice

**Recommended course-load (hours):**

**Per week:** 2 / 2 **Per study period:** 28 / 28

**Course method:** present

**Number of ECTS credits:** 5

**Recommended semester/trimester of the course:** 1., 3.

**Course level:** I., II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

To provide the students with knowledge of graphics algorithms and basic principles of computer graphics.

**Brief outline of the course:**

Graphics hardware, input and output devices. Color models, palettes. Raster graphics algorithms for drawing 2D primitives. Filling and clipping. Curve modeling, interpolations and approximations, spline forms, Bézier curves, B-splines, surfaces. Homogenous coordinates, affine transformations, perspective and parallel projections. Visible-surface determination, illumination and shading. Rendering techniques, photorealism, textures, ray tracing, radiosity. Object representations, computer animation, virtual reality.

**Recommended literature:**

FOLEY, J. D., van DAM, A., FEINER, S., HUGHES, J.: Computer Graphics: Principles and Practice, Addison-Wesley, 1991

MORTENSON, M.E.: Geometric modeling, 2.ed., Willey, 1997

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 292

A	B	C	D	E	FX
14.04	9.93	13.36	23.63	30.48	8.56

**Provides:** prof. RNDr. Gabriel Semanišin, PhD., RNDr. Rastislav Krivoš-Belluš, PhD.

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚINF/ UNS1/15	<b>Course name:</b> Introduction to neural networks				
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 5					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<b>Course level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b> To understand and to know applications of basic paradigms of neural networks. To learn working with software for neural network models.					
<b>Brief outline of the course:</b> Basic models of computational units - neurons (linear threshold gates, polynomial threshold gates, perceptrons), their computational capability, algorithms of adaptations. Feed-forward neural networks, back propagation algorithm. Hopfield neural networks. ART neural networks. Using neural networks to solving of problems. Genetic and evolution algorithms.					
<b>Recommended literature:</b> J. Hertz, A. Krogh, R.G. Palmer: Introduction to the theory of neural computation, Addison Wesley, 1991 HASSOUN, M. H.: Fundamentals of artificial neural networks, The MIT Press, 1995					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 420					
A	B	C	D	E	FX
12.38	16.67	23.33	19.76	23.33	4.52
<b>Provides:</b> doc. RNDr. Gabriela Andrejková, CSc.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚINF/  
LOP1/15      **Course name:** Logic programming

**Course type, scope and the method:**

**Course type:** Lecture / Practice

**Recommended course-load (hours):**

**Per week:** 2 / 2 **Per study period:** 28 / 28

**Course method:** present

**Number of ECTS credits:** 5

**Recommended semester/trimester of the course:** 2., 4.

**Course level:** I., II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

To learn bases of declarative programming (as complementary method to procedural programming) and basic methods of implementations of logic programming languages.

**Brief outline of the course:**

Facts and rules in Prolog. Unification of terms (Robinson's unification algorithm). Recursion and backtrack in Prolog. Computational step and computational tree. Classification of terms. Lists. Function and operators in composed terms. Predicates for input and output. Dynamic database. Cycles (repeat-fail, for). Predicates related to backtrack. Cut. Predicates evaluating of arithmetic expressions.

**Recommended literature:**

Bratko, I.: Prolog – programming for artificial intelligence, third edition. Addison-Wesley, 2001

Nilsson U., Maluszynski J.: Logic, Programming and Prolog, John Wiley & Sons Ltd. 1995

Nienhuys-Cheng Sh.H., Wolf R.: Foundations of Inductive Logic Programming, Springer-Verlag, 1997

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 265

A	B	C	D	E	FX
23.02	11.32	13.21	24.15	26.42	1.89

**Provides:** RNDr. Ondrej Krídlo, PhD.

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ MKVU/15	<b>Course name:</b> Microbiology and basics of virology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture / Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b> 1.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
Attendance of practicals (at least 90%), 2 written examinations during semester, final oral examination										
<b>Learning outcomes:</b>										
Students will obtain a basic informations on viruses, prokaryotic and eukaryotic microorganisms, their cytology, physiology, genetics, ecology, classification, and importance . Information on basic methods for studying microorganisms will be provided.										
<b>Brief outline of the course:</b>										
Viruses, prokaryotic and eukaryotic microorganisms, their cytology, physiology, genetics, ecology, classification. The importance of microorganisms for humans and environment.										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 1257										
A	B	C	D	E	FX					
24.42	12.01	16.87	19.65	22.51	4.53					
<b>Provides:</b> doc. RNDr. Peter Pristaš, CSc., RNDr. Mariana Kolesárová, PhD., RNDr. Lenka Maliničová, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚFV/ FEP1/07	<b>Course name:</b> Microcomputer Based Science Laboratory
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 2 <b>Per study period:</b> 14 / 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 4	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> test 30 points active participation 10 points project (development of mathematical model, videomeasurement and physical experiment) 60 points The final assessment is based on the sum of partial results	
<b>Learning outcomes:</b> After the course student gains an overview about the possible use of digital technologies to support active learning in science. He gains skills to use and develop activities on measuring data with the help of datalogging, measuring on picture and viderecording and modeling natural processes. Student is able to implement such activities in science teaching to support active learning and conceptual understanding.	
<b>Brief outline of the course:</b> The aim of the course is to present the use of digital technologies to enhance active learning in science with the help of datalogging, videomeasurement and modeling tools. Mathematical modeling is based on dynamical modeling of natural phenomena. Within the course students carry out computer-based experiments, videomeasurements and measurement on picture and create corresponding models. The activities involve selected topics of secondary schools science. The emphasize is put on the methods of implementation of the activities with regard to active students ' learning.	
<b>Recommended literature:</b> [1]Koubek, V., Pecen, I.: Fyzikálne experimenty a modely v školskom mikropočítačom podporovanom laboratóriu, Univerzita Komenského, Bratislava, 1999 [2]Príručka COACH [3] <a href="http://physedu.science.upjs.sk/sis/fyzika/experimenty/index.htm">http://physedu.science.upjs.sk/sis/fyzika/experimenty/index.htm</a>	
<b>Course language:</b> Slovak	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 34

A	B	C	D	E	FX
44.12	44.12	11.76	0.0	0.0	0.0

**Provides:** doc. RNDr. Zuzana Ješková, PhD.**Date of last modification:** 03.05.2015**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚFV/ MDT06/06	<b>Course name:</b> Modern Didactical Technics									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 3										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 76										
A	B	C	D	E	FX					
97.37	1.32	0.0	0.0	0.0	1.32					
<b>Provides:</b> doc. RNDr. Marián Kireš, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚFV/ MDT06/15	<b>Course name:</b> Modern Didactical Technology
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> All assignments must be uploaded by a student and accepted by a teacher according to assessment criteria. Active participation at the seminar with minimum 80% participation.	
<b>Learning outcomes:</b> Student graduated from subject will be able: - recognise basic tools for teaching activities, - to use all types of actual tools in education of science or humanities, - to design and realise educational activities by using modern technologies.	
<b>Brief outline of the course:</b> 0. Introduction 1. Cloud services 2. Digital notebooks 3. Digital imaging 4. Digital image processing 5. Digital text processing 6. Digital audio processing 7. Digital video, processing, videoconferencing 8. Google online services 9. Interactive didactical system (whiteboard, e-voting system, tablet) 10. Computer based laboratories 11. Digital technologies and virtual experiments 12. Didigital teacher's workspace	
<b>Recommended literature:</b> 1. Kireš, M. et al.: Modern didactical techniques in teacher practice, Košice: Elfa, 2010, ISBN 788080861353 2. actual information from web sites related to didactical technologies, 3. catalogues of teaching tools, 3. actual articles about modern trends in science and humanities education.	

**Course language:**

Slovak, English

**Notes:****Course assessment**

Total number of assessed students: 44

A	B	C	D	E	FX
34.09	45.45	11.36	4.55	4.55	0.0

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

**Date of last modification:** 22.02.2019

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPE/ PPD/15	<b>Course name:</b> Pedagogy and Psychology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b>										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> Per study period:										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 1										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> II.										
<b>Prerequisites:</b> KPE/PDU/15 and KPPaPZ/PPgU/15										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 438										
A	B	C	D	E	FX					
29.91	24.89	25.57	14.61	3.65	1.37					
<b>Provides:</b>										
<b>Date of last modification:</b> 17.04.2020										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> Dek. PF UPJŠ/PPZ/13	<b>Course name:</b> Personality Development and Key Competences for Success on a Labour Market									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> Per study period: 14s										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 39										
A	B	C	D	E	FX					
100.0	0.0	0.0	0.0	0.0	0.0					
<b>Provides:</b> RNDr. Peter Stefányi, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ FG1/03	<b>Course name:</b> Phytogeography									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture / Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b> 1., 3.										
<b>Course level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
Written work.										
Exam.										
<b>Learning outcomes:</b>										
To obtain theoretical and practical knowledge from phytogeography.										
<b>Brief outline of the course:</b>										
History of phytogeography. Plants and environment. Chorology, area, area disjunctions, relics, endemites, vicariancy, floral elements. Main course of florogenesis since paleozoic to quaternary ages. Postglacial evolution of Slovak vegetation. Regional phytogeography of Earth. Vegetation geography: from tropical rainforests to tundras. Changes of earth vegetation and their study. Geographical origin of cultivated plants.										
Practices: Fieldworks. Preparing of maps. Phytogeographical division of Slovakia. Students seminar works on phytogeography.										
<b>Recommended literature:</b>										
Hendrych R.: Fytogeografie. - SPN, Praha 1984.										
Brown J. H., Lomolino M. V.: Biogeography. - Sinauer Associates, Sunderland, 1998.										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 355										
A	B	C	D	E	FX					
38.87	22.25	21.69	8.17	8.17	0.85					
<b>Provides:</b> prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčík, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ PDSI1/15	<b>Course name:</b> Pro-seminar to diploma thesis in informatics
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b> To inform students about areas of informatics they are suitable to work in diploma theses. In the end of semester students have to prepared themes of diploma theses, goals and recommended study literature.	
<b>Brief outline of the course:</b> The seminar is oriented to problems prospective to preparations of Diploma theses.	
<b>Recommended literature:</b> MEŠKO, D., KATUŠČÁK, D. Akademická príručka. 1. vyd. Vydavateľstvo Osveta : Martin, 2004. 316 s. ISBN 80-8063-150-6 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Eco, U.: Jak napsat diplomovou práci, z taliančiny Come si fa una tesi di laurea, Milano, 1977, Olomouc, Votobiax. Odborná a vedecká literatúra týkajúca sa diplomovej práce podľa odporúčania vedúceho diplomovej práce.	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 451	
abs	n
99.33	0.67
<b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD., doc. RNDr. Gabriela Andrejková, CSc., doc. RNDr. Jozef Jirásek, PhD.	
<b>Date of last modification:</b> 03.05.2015	

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/KPE/ EPU/15	<b>Course name:</b> Professional Ethics for Teachers and School Counsellors									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 2., 4.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 333										
A	B	C	D	E	FX					
95.5	3.9	0.6	0.0	0.0	0.0					
<b>Provides:</b> Mgr. Lucia Hricová, PhD.										
<b>Date of last modification:</b> 25.03.2020										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ JAC1/15	<b>Course name:</b> Programming language C
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1., 3.	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Practices attendance and activity. Home assignment Final project.	
<b>Learning outcomes:</b> Become skilled in language C and get knowledge of the theoretical concepts that are used in the development in low-level software.	
<b>Brief outline of the course:</b> 1. Installing and setting up the development environment. Simple program in C, compiling and running. 2. Loops, conditions. Introduction to arrays. Numeric functions from numeric library. Compiling with `gcc` and setting up the warnings and hints. 3. Functions. Statically allocated arrays. Array gotchas in C. Makefiles for complex projects. 4. Basic I/O functions. Functions with array parameters and specifics. 5. Dynamic memory allocation as a mechanism for dynamic arrays. Strings as a special case of arrays. Strings and file I/O. 6. String manipulation principles and functions from standard library. 7. Working with binary files. 8. Custom data types. Structs. 9. Dynamic data structures. Linked lists. Stacks and operations with these structs. 10. Additional operations with dynamic data structures. Parameter passing with values and name. 11. Useful tricks and hints: passing parameters from operating system, exit codes. Multidimensional arrays. 12. Function pointers. Generic pointers. Unions.	
<b>Recommended literature:</b> 1. A. D. Marshall: Programming in C: UNIX System Calls and Subroutines using C. [online] < <a href="http://www.cs.cf.ac.uk/Dave/C/CE.html">http://www.cs.cf.ac.uk/Dave/C/CE.html</a> > 2. J. Maasen: C for Java Programmers. [online] < <a href="http://www.cs.vu.nl/~jason/college/dictaat.pdf">http://www.cs.vu.nl/~jason/college/dictaat.pdf</a> > 3. Bruce Eckel: Thinking in C. [online] < <a href="http://mindview.net/CDs/ThinkingInC">http://mindview.net/CDs/ThinkingInC</a> >	
<b>Course language:</b>	

**Notes:****Course assessment**

Total number of assessed students: 196

A	B	C	D	E	FX
36.22	18.37	15.82	14.29	10.71	4.59

**Provides:** RNDr. PhDr. Peter Pisarčík**Date of last modification:** 07.09.2015**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/PPgU/15	<b>Course name:</b> Psychology and Educational Psychology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture / Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b> 1.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 1353										
A	B	C	D	E	FX					
10.86	18.55	22.47	22.84	22.32	2.96					
<b>Provides:</b> prof. PhDr. Ol'ga Orosová, CSc., Mgr. Lucia Hricová, PhD., PhDr. Anna Janovská, PhD.										
<b>Date of last modification:</b> 06.09.2019										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/PsZ/15	<b>Course name:</b> Psychology of Health									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 3.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 69										
A	B	C	D	E	FX					
100.0	0.0	0.0	0.0	0.0	0.0					
<b>Provides:</b> Mgr. Jozef Benka, PhD. et PhD.										
<b>Date of last modification:</b> 22.03.2019										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KSSFaK/ ČGUAP/15	<b>Course name:</b> Reading Literacy in Educational Process
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 25	
abs	n
100.0	0.0
<b>Provides:</b> doc. PaedDr. Ivica Hajdučeková, PhD.	
<b>Date of last modification:</b> 16.02.2019	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ PPU1a/15	<b>Course name:</b> Running practice
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 176	
abs	n
97.16	2.84
<b>Provides:</b> RNDr. JUDr. Pavol Sokol, PhD.	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ MPPb/15	<b>Course name:</b> Scheduled practice teaching
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 36s <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 1	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> KPE/MPPa/15 and KPE/PDU/15 and (KPPaPZ/PaSPP/09 or KPPaPZ/PPgU/15)	
<b>Conditions for course completion:</b> During the practice students observe 11 computer science lessons and leads one own computer science hour under the guidance of a teacher trainer. Confirmation of classroom visits. Written assessment from the teacher trainer.	
<b>Learning outcomes:</b> Students acquire knowledge by observing the practical application of teaching skills for teaching the subject of computer science and getting to know the organization of school work. Introduction into practical implementation of computer science lesson.	
<b>Brief outline of the course:</b> Students observe the process of teaching computer science at primary and secondary school and analysed it with teacher trainer. Practice takes place continuously during the course of the semester. Practice is scheduled once a week at the time of first to third lesson in schools. The first two hours observation/teaching, the third hour analysing process under the guidance of a teacher trainer.	
<b>Recommended literature:</b> Current computer science textbooks for primary and secondary schools in Slovakia.	
<b>Course language:</b> Slovak	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 65	
abs	n
100.0	0.0
<b>Provides:</b> doc. RNDr. Ľubomír Šnajder, PhD., PaedDr. Ján Guniš, PhD.	
<b>Date of last modification:</b> 03.05.2015	

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚBEV/ MPPb/15	<b>Course name:</b> Scheduled practice teaching
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 36s <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 1	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> KPE/MPPa/15 and KPE/PDU/15 and (KPPaPZ/PaSPP/09 or KPPaPZ/PPgU/15)	
<b>Conditions for course completion:</b> During the practice student observe 11 biology lessons and leads one own biology hour under the guidance of a teacher trainer. Confirmation of classroom visits. Written assessment from the teacher trainer.	
<b>Learning outcomes:</b> Students acquire knowledge by observing the practical application of teaching skills for teaching the subject of biology and getting to know the organization of school work. Introduction into practical implementation of biology lesson.	
<b>Brief outline of the course:</b> Students observe the process of teaching biology at primary and secondary school and analyzed it with teacher trainer. Practice takes place continuously during the course of the semester. Practice is scheduled once a week at the time of first to third lesson in schools. The first two hours observation/teaching, the third hour analysing process under the guidance of a teacher trainer.	
<b>Recommended literature:</b> Current biology textbooks for primary and secondary schools in Slovakia.	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 432	
abs	n
99.54	0.46
<b>Provides:</b>	
<b>Date of last modification:</b> 03.05.2015	

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ SPP/08	<b>Course name:</b> School experiments and observations				
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 1., 3.					
<b>Course level:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Didactic analysis after conducted experiments and observations.					
<b>Learning outcomes:</b> Teacher preparation, how to carry out biological school experiments and classroom observations.					
<b>Brief outline of the course:</b> The course is aimed at training and application skills that are necessary for the implementation of experiments and observations in the classroom. It helps students develop theoretical knowledge in practical work during training and familiarizes them with didactic methods in demonstrating the biological observation and educational experiments. It focuses on the possibilities of applying these methods in the various stages of a teaching unit.					
<b>Recommended literature:</b> HUDÁKOVÁ, A., KIMÁKOVÁ, K. 2005. Demonstračné pokusy a pozorovania z biológie rastlín. Košice: UPJŠ; Prírodovedecká fakulta, 84 s. ISBN 80-7097-610-1. Internal study materials in Moodle <a href="https://lms.upjs.sk/login/index.php">https://lms.upjs.sk/login/index.php</a>					
<b>Course language:</b> Slovak					
<b>Notes:</b> x					
<b>Course assessment</b> Total number of assessed students: 71					
A	B	C	D	E	FX
67.61	18.31	11.27	2.82	0.0	0.0
<b>Provides:</b> PaedDr. Andrea Lešková, PhD.					
<b>Date of last modification:</b> 20.02.2020					
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ ÚTVŠ/CM/13	<b>Course name:</b> Seaside Aerobic Exercise
<b>Course type, scope and the method:</b>	
<b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 36s <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for course completion: Attendance	
<b>Learning outcomes:</b> Learning outcomes: Students will be provided an overview of possibilities how to spend leisure time in seaside conditions actively and their skills in work and communication with clients will be improved. Students will acquire practical experience in organising the cultural and art-oriented events, with the aim to improve the stay and to create positive experiences for visitors.	
<b>Brief outline of the course:</b> Brief outline of the course: 1. Basics of seaside aerobics 2. Morning exercises 3. Pilates and its application in seaside conditions 4. Exercises for the spine 5. Yoga basics 6. Sport as a part of leisure time 7. Application of projects of productive spending of leisure time for different age and social groups (children, young people, elderly) 8. Application of seaside cultural and art-oriented activities in leisure time	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 42	
abs	n
11.9	88.1

**Provides:** Mgr. Alena Buková, PhD., Mgr. Agata Horbacz, PhD.

**Date of last modification:** 15.03.2019

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚINF/  
DSU1a/15

**Course name:** Seminar to diploma theses in informatics XI

**Course type, scope and the method:**

**Course type:** Practice

**Recommended course-load (hours):**

**Per week:** 2 **Per study period:** 28

**Course method:** present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:** 2.

**Course level:** II.

**Prerequisites:**

**Conditions for course completion:**

Elaboration and presentation of papers on selected areas of computer science education.  
Present the interim results of the diploma thesis.

**Learning outcomes:**

Get an overview of the results of educational research in the field of computer science education.  
To learn currently work on the diploma thesis, to present partial results of the pedagogical research work on it.

**Brief outline of the course:**

Educational research in the field of computer science education. Study of educational literature (conference proceedings, journals, studies) focusing on selected issues of computer science education.

Presentations of interim results of students' diploma theses.

**Recommended literature:**

1. KATUŠČÁK, D. Ako písat' vysokoškolské a kvalifikačné práce: ako písat' seminárne práce a ročníkové práce, práce študentskej vedeckej a odbornej činnosti, diplomové, záverečné a atestačné práce a dizertácie. 3. vyd. Nitra : Enigma, 2004. 162 s. ISBN 80-89132-10-3.
2. ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure.
3. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents.
4. ECO, U. Jak napsat diplomovou práci. Olomouc : Votobia, 1997. 278 s. ISBN 80-7098-173-7.
5. Digital libraries (ACM Digital Library, IEEEExplore, DOAJ)
6. Scientific literature relevant to diploma thesis according of recommendation of supervisor.

**Course language:**

Slovak

**Notes:**

**Course assessment**

Total number of assessed students: 6

abs	n
100.0	0.0

**Provides:** doc. RNDr. Ľubomír Šnajder, PhD.**Date of last modification:** 03.05.2015**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚINF/ DSU1b/15	<b>Course name:</b> Seminar to diploma theses in informatics XI
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> II.	
<b>Prerequisites:</b> ÚINF/DSU1a/15	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b> Get an experience with design, realization and evaluation of own educational research in the field of computer science education. To learn currently work on the diploma thesis, to present partial results of the pedagogical research work on it.	
<b>Brief outline of the course:</b> Educational research in the field of computer science education. Study of educational literature (conference proceedings, journals, studies) focusing on selected issues of computer science education. Design, realization and evaluation of own educational research in the field of computer science education. Presentations of interim results of students' diploma theses.	
<b>Recommended literature:</b> 1. HENDL, Jan (2005). Kvalitativní výzkum - základní metody a aplikace. Praha : Portál, 2005. ISBN 80-7367-040-2. 2. ŠVARÍČEK, Roman - ŠEĎOVÁ, Klára et al. (2007). Kvalitativní výzkum v pedagogických vědách. Praha : Portál, 2007. ISBN 978-80-7367-313-0. 3. GAVORA, Peter et al. (2010). Elektronická učebnica pedagogického výskumu. [online]. Bratislava : Univerzita Komenského, 2010. Dostupné na: <a href="http://www.e-metodologia.fedu.uniba.sk/">http://www.e-metodologia.fedu.uniba.sk/</a> ISBN 978–80–223–2951–4. 4. BELL, Tim - MORGAN, Jack (2014). Computer Science Field Guide. University of Canterbury, New Zealand. Dostupné na: <a href="http://www.cosc.canterbury.ac.nz/csfieldguide/index.html">http://www.cosc.canterbury.ac.nz/csfieldguide/index.html</a> 5. Digital libraries (ACM Digital Library, IEEEExplore, DOAJ) 6. Scientific literature relevant to diploma thesis according of recommendation of supervisor.	
<b>Course language:</b> Slovak	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 30

abs	n
100.0	0.0

**Provides:** doc. RNDr. Ľubomír Šnajder, PhD.**Date of last modification:** 03.05.2015**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** KSSFaK/VSJU/15      **Course name:** Slovak Language for Teachers

**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:** 2

**Recommended semester/trimester of the course:** 1., 3.

**Course level:** II.

**Prerequisites:**

**Conditions for course completion:**

passing a final test

**Learning outcomes:**

Mastering of standard Slovak in spoken and written discourse. Becoming familiarized with codification manuals, acquiring skills related to bibliography and quotation standards. Mastering of written communication in accordance with current orthographical rules. Mastering of basic characteristics of expressions of text and style and fundamentals of text composition.

**Brief outline of the course:**

Characteristics of basic terms of general linguistics (language – speech, language functions, the sign character of language, language levels, content and form in language, individual and general aspect of language units) on interdisciplinary background and with the application to Slovak as a national language. Language standard, codification, usus. Basic codification manuals. Application of orthographic rules in practical documents. Sound culture, pronunciation styles. Orthoepic phenomena in vowels and consonants. Application of rhythmic law and its exceptions. Assimilation and its specific features in Slovak. Style, stylization – methods and demonstration of structure of text components.

**Recommended literature:**

Krátky slovník slovenského jazyka. Bratislava: Veda 1997.

Slovník súčasného slovenského jazyka. Bratislava: Veda 2006.

Slovník súčasného slovenského jazyka. Bratislava: Veda 2011.

Pravidlá slovenského pravopisu. Bratislava: Veda 2000.

KRÁĽ, Á.: Pravidlá slovenskej výslovnosti. Bratislava, SPN 1984; 1988. 632 s.

ONDRAŠ, Š. – SABOL, J.: Úvod do štúdia jazykov. 3. vyd. Bratislava, SPN 1987. 343s.

SABOL, J.- SLANČOVÁ, D. - SOKOLOVÁ, M.: Kultúra hovoreného slova. Prešov, FF UPJŠ 1989.

SABOL, J. – BÓNOVÁ, I. – SOKOLOVÁ, M.: Kultúra hovoreného prejavu. Prešov: FF PU 2006.

FINDRA, J.: Štylistika slovenčiny. Martin : Osveta, 2004.

FINDRA, Ján: Štylistika slovenčiny v cvičeniach. Martin : Osveta, 2005.

SLANČOVÁ, D.: Praktická štylistika. 2., upravené a doplnené vydanie. Prešov: Slovacontact

1996. 178 s. ISBN 80-901417-9-X.

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 74

A	B	C	D	E	FX
17.57	32.43	25.68	16.22	8.11	0.0

**Provides:** PhDr. Iveta Bónová, PhD., PhDr. Lucia Jasinská, PhD., Mgr. Lena Ivančová, PhD.

**Date of last modification:** 15.05.2019

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ TVa/11	<b>Course name:</b> Sports Activities I.
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> I., I.II., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for course completion: Min. 80% of active participation in classes.	
<b>Learning outcomes:</b> Learning outcomes: Increasing physical condition and performance within individual sports. Strengthening the relationship of students to the selected sports activity and its continual improvement.	
<b>Brief outline of the course:</b> Brief outline of the course: Within the optional subject, the Institute of Physical Education and Sports of Pavol Jozef Šafárik University provides for students the following sports activities: aerobics, basketball, badminton, floorball, yoga, pilates, swimming, body-building, indoor football, self-defence and karate, table tennis, sports for unfit persons, streetball, tennis, and volleyball. In the first two semesters of the first level of education students will master basic characteristics and particularities of individual sports, motor skills, game activities, they will improve level of their physical condition, coordination abilities, physical performance, and motor performance fitness. Last but not least, the important role of sports activities is to eliminate swimming illiteracy and by means of a special program of medical physical education to influence and mitigate unfitness. In addition to these sports, the Institute offers for those who are interested winter and summer physical education trainings with an attractive program and organises various competitions, either at the premises of the faculty or University or competitions with national or international participation.	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 12947

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
88.64	0.06	0.0	0.0	0.0	0.03	7.22	4.05

**Provides:** doc. PhDr. Ivan Šulc, CSc., Mgr. Zuzana Kuchelová, PhD., Mgr. Peter Bakalár, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Dávid Kaško, Mgr. Aurel Zelko, PhD., Mgr. Dana Dračková, PhD., Mgr. Marcel Čurgali, PaedDr. Jana Potočníková, PhD.

**Date of last modification:** 18.03.2019

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ TVb/11	<b>Course name:</b> Sports Activities II.
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> I., I.II., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for course completion: Final assessment and active participation in classes - min. 75%.	
<b>Learning outcomes:</b> Learning outcomes: Increasing physical condition and performance within individual sports. Strengthening the relationship of students to the selected sports activity and its continual improvement.	
<b>Brief outline of the course:</b> Brief outline of the course: Within the optional subject, the Institute of Physical Education and Sports of Pavol Jozef Šafárik University provides for students the following sports activities: aerobics, basketball, badminton, floorball, yoga, pilates, swimming, body-building, indoor football, self-defence and karate, table tennis, sports for unfit persons, streetball, tennis, and volleyball. In the first two semesters of the first level of education students will master basic characteristics and particularities of individual sports, motor skills, game activities, they will improve level of their physical condition, coordination abilities, physical performance, and motor performance fitness. Last but not least, the important role of sports activities is to eliminate swimming illiteracy and by means of a special program of medical physical education to influence and mitigate unfitness. In addition to these sports, the Institute offers for those who are interested winter and summer physical education trainings with an attractive program and organises various competitions, either at the premises of the faculty or University or competitions with national or international participation.	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 11186

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.58	0.55	0.02	0.0	0.0	0.05	9.99	3.8

**Provides:** doc. PhDr. Ivan Šulc, CSc., Mgr. Zuzana Kuchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Peter Bakalár, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Dávid Kaško, Mgr. Aurel Zelko, PhD., Mgr. Dana Dračková, PhD., Mgr. Marcel Čurgali, PaedDr. Jana Potočníková, PhD.

**Date of last modification:** 18.03.2019

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice													
<b>Faculty:</b> Faculty of Science													
<b>Course ID:</b> ÚTVŠ/ TVc/11	<b>Course name:</b> Sports Activities III.												
<b>Course type, scope and the method:</b>													
<b>Course type:</b> Practice													
<b>Recommended course-load (hours):</b>													
<b>Per week:</b> 2 <b>Per study period:</b> 28													
<b>Course method:</b> present													
<b>Number of ECTS credits:</b> 2													
<b>Recommended semester/trimester of the course:</b> 3.													
<b>Course level:</b> I., I.II., II.													
<b>Prerequisites:</b>													
<b>Conditions for course completion:</b>													
<b>Learning outcomes:</b>													
<b>Brief outline of the course:</b>													
<b>Recommended literature:</b>													
<b>Course language:</b>													
<b>Notes:</b>													
<b>Course assessment</b>													
Total number of assessed students: 7741													
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs						
90.03	0.04	0.01	0.0	0.0	0.03	4.04	5.85						
<b>Provides:</b> doc. PhDr. Ivan Šulc, CSc., Mgr. Zuzana Kuchelová, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Peter Bakalár, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Dávid Kaško, Mgr. Aurel Zelko, PhD., Mgr. Dana Dračková, PhD., Mgr. Marcel Čurgali, PaedDr. Jana Potočníková, PhD.													
<b>Date of last modification:</b> 03.05.2015													
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.													

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice														
<b>Faculty:</b> Faculty of Science														
<b>Course ID:</b> ÚTVŠ/ TVd/11	<b>Course name:</b> Sports Activities IV.													
<b>Course type, scope and the method:</b>														
<b>Course type:</b> Practice														
<b>Recommended course-load (hours):</b>														
<b>Per week:</b> 2 <b>Per study period:</b> 28														
<b>Course method:</b> present														
<b>Number of ECTS credits:</b> 2														
<b>Recommended semester/trimester of the course:</b> 4.														
<b>Course level:</b> I., I.II., II.														
<b>Prerequisites:</b>														
<b>Conditions for course completion:</b>														
<b>Learning outcomes:</b>														
<b>Brief outline of the course:</b>														
<b>Recommended literature:</b>														
<b>Course language:</b>														
<b>Notes:</b>														
<b>Course assessment</b>														
Total number of assessed students: 5086														
abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs							
85.19	0.29	0.04	0.0	0.0	0.0	6.78	7.69							
<b>Provides:</b> doc. PhDr. Ivan Šulc, CSc., Mgr. Zuzana Kuchelová, PhD., Mgr. Peter Bakalár, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, prof. RNDr. Stanislav Vokál, DrSc., Mgr. Lucia Kršňáková, PhD., Mgr. Dávid Kaško, Mgr. Aurel Zelko, PhD., Mgr. Dana Dračková, PhD., Mgr. Marcel Čurgali, PaedDr. Jana Potočníková, PhD.														
<b>Date of last modification:</b> 03.05.2015														
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.														

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
SVK/01      **Course name:** Student Scientific Conference

**Course type, scope and the method:**

**Course type:**

**Recommended course-load (hours):**

**Per week:** Per study period:

**Course method:** present

**Number of ECTS credits:** 4

**Recommended semester/trimester of the course:** 2.

**Course level:** I., II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 277

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

**Provides:**

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚINF/  
SVK1/15      **Course name:** Student scientific conference

**Course type, scope and the method:**

**Course type:**

**Recommended course-load (hours):**

**Per week:** Per study period:

**Course method:** present

**Number of ECTS credits:** 4

**Recommended semester/trimester of the course:** 2., 4.

**Course level:** I., II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 171

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

**Provides:**

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚTVŠ/  
LKSp/13      **Course name:** Summer Course-Rafting of TISA River

**Course type, scope and the method:**

**Course type:** Practice

**Recommended course-load (hours):**

**Per week:** Per study period: 36s

**Course method:** present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:**

**Course level:** I., II.

**Prerequisites:**

**Conditions for course completion:**

Conditions for course completion:

Attendance

Final assessment: Raft control on the waterway (attended/not attended)

**Learning outcomes:**

Learning outcomes:

Students have knowledge of rafts (canoe) and their control on waterway.

**Brief outline of the course:**

Brief outline of the course:

1. Assessment of difficulty of waterways
2. Safety rules for rafting
3. Setting up a crew
4. Practical skills training using an empty canoe
5. Canoe lifting and carrying
6. Putting the canoe in the water without a shore contact
7. Getting in the canoe
8. Exiting the canoe
9. Taking the canoe out of the water
10. Steering
  - a) The pry stroke (on fast waterways)
  - b) The draw stroke
11. Capsizing
12. Commands

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 151

abs	n
45.03	54.97

**Provides:** Mgr. Peter Bakalár, PhD.**Date of last modification:** 18.03.2019**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KPE/ MPPa/15	<b>Course name:</b> Supervised Teaching Practice
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 36s <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 757	
abs	n
99.87	0.13
<b>Provides:</b> doc. PhDr. Beata Gajdošová, PhD., PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Boberová, PhD.	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ KP/12	<b>Course name:</b> Survival Course
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 36s <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Conditions for course completion: Attendance Final assessment: continuous fulfilment of all tasks within the course	
<b>Learning outcomes:</b> Learning outcomes: Students will be familiarized with principles of safe stay and movement in extreme natural conditions as they will obtain theoretical knowledge and practical skills to solve the extraordinary and demanding situations connected with survival and minimization of damage to health. The course develops team work and students will learn how to manage and face the situations that require overcoming of obstacles.	
<b>Brief outline of the course:</b> Brief outline of the course: Lectures: 1. Principles of behaviour and safety for movement and stay in unknown mountains 2. Preparation and leadership of tour 3. Objective and subjective danger in mountains 4. Principles of hygiene and prevention of damage to health in extreme conditions Exercises: 1. Movement in terrain, orientation and navigation in terrain (compasses, GPS) 2. Preparation of improvised overnight stay 3. Water treatment and food preparation.	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 392

abs	n
44.39	55.61

**Provides:** Mgr. Marek Valanský, MUDr. Peter Dombrovský**Date of last modification:** 15.03.2019**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPE/ PDU/15	<b>Course name:</b> Teaching Methodology and Pedagogy									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b> 1.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 1427										
A	B	C	D	E	FX					
15.49	24.18	26.49	19.06	8.13	6.66					
<b>Provides:</b> PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Boberová, PhD., Mgr. Katarína Petriková, PhD.										
<b>Date of last modification:</b> 13.09.2019										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/UPR/15	<b>Course name:</b> The Art of Aiding by Verbal Exchange									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 2.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 105										
A	B	C	D	E	FX					
92.38	1.9	3.81	0.95	0.95	0.0					
<b>Provides:</b> Mgr. Ondrej Kalina, PhD.										
<b>Date of last modification:</b> 18.03.2019										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/ZMPPV/15	<b>Course name:</b> The Fundamentals of Pedagogico-Psychological Research Methodology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture / Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 4										
<b>Recommended semester/trimester of the course:</b> 2.										
<b>Course level:</b> II.										
<b>Prerequisites:</b> KPPaPZ/PPgU/15 and KPE/PDU/15										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 442										
A	B	C	D	E	FX					
19.0	25.79	23.76	19.23	11.99	0.23					
<b>Provides:</b> Mgr. Mária Bačíková, PhD., PhDr. Anna Janovská, PhD.										
<b>Date of last modification:</b> 25.03.2020										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚFV/ VMV1/04	<b>Course name:</b> Using Multimedia in Education									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture / Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 1 / 2 <b>Per study period:</b> 14 / 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 4										
<b>Recommended semester/trimester of the course:</b> 2.										
<b>Course level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 85										
A	B	C	D	E	FX					
85.88	10.59	0.0	0.0	1.18	2.35					
<b>Provides:</b> doc. RNDr. Marián Kireš, PhD., RNDr. Rastislav Adamek, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚTVŠ/  
ZKLS//13      **Course name:** Winter Ski Training Course

**Course type, scope and the method:**

**Course type:** Practice

**Recommended course-load (hours):**

**Per week:** 36 **Per study period:** 504

**Course method:** present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:**

**Course level:** I., II.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 97

abs	n
32.99	67.01

**Provides:** doc. PhDr. Ivan Šulc, CSc., Mgr. Marek Valanský

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Ol'ga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

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

**Course assessment**

Total number of assessed students: 913

A	B	C	D	E	FX
23.77	23.33	24.64	18.51	7.78	1.97

**Provides:** prof. RNDr. Ľubomír Kováč, CSc.**Date of last modification:** 05.10.2017**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ ZO1/04	<b>Course name:</b> Zoology I									
<b>Course type, scope and the method:</b>										
Course type: Lecture / Practice										
<b>Recommended course-load (hours):</b>										
Per week: 2 / 2 Per study period: 28 / 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b> 1.										
<b>Course level:</b> II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
Basis of Invertebrata taxonomy including taxonomy of Monocytzoa. Importance and function of chosen individual taxons. Phylogenetic relations.										
<b>Brief outline of the course:</b>										
Anatomy, morphology and development of separate groups of Invertebrates – especially Porifera, Cnidaria, Plathelminthes, Nemathelminthes, Mollusca, Anelida, Arthropoda, Echinodermata. Characteristic species.										
<b>Recommended literature:</b>										
Meglitsch, P.A.: Invertebrate Zoology. Oxford University Press. New York, Oxford, 1991 Brusca, R. C., Brusca, G. J.: Invertebrates. Massachusetts, 1990										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 1334										
A	B	C	D	E	FX					
7.72	15.37	22.19	21.66	24.66	8.4					
<b>Provides:</b> doc. RNDr. Ľubomír Panigaj, CSc., RNDr. Peter Ľuptáčik, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.										

## COURSE INFORMATION LETTER

**University:** P. J. Šafárik University in Košice

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
ZOO1/11      **Course name:** Zoológia II (pre magisterské štúdium)

**Course type, scope and the method:**

**Course type:** Lecture / Practice

**Recommended course-load (hours):**

**Per week:** 2 / 2 **Per study period:** 28 / 28

**Course method:** present

**Number of ECTS credits:** 5

**Recommended semester/trimester of the course:** 2.

**Course level:** II.

**Prerequisites:** ÚBEV/ZO1/04

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 61

A	B	C	D	E	FX
24.59	32.79	19.67	9.84	13.11	0.0

**Provides:** RNDr. Peter Ľuptáčik, PhD., doc. RNDr. Marcel Uhrin, PhD.

**Date of last modification:** 03.05.2015

**Approved:** doc. RNDr. Stanislav Krajčí, PhD., prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Katarína Kimáková, CSc., doc. RNDr. Gabriela Andrejková, CSc., prof. Volodymyr Starosta, DrSc.