University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/

Course name: English Language for PhD Students 1

AJD1/07

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 credits: 2

Recommended semester/trimester of the course: 1.

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 558

N	Ne	P	Pr	abs	neabs
0.0	0.0	56.99	0.0	43.01	0.0

Provides: PhDr. Helena Petruňová, CSc., Mgr. Zuzana Kolaříková, PhD., Mgr. Zuzana Naďová

Date of last modification: 06.02.2018

Approved: Co-guaranteeprof. RNDr. Vladimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/

Course name: English Language for PhD Students 2

AJD2/07

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 credits: 3

Recommended semester/trimester of the course: 2.

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Course assessment

Total number of assessed students: 558

N	Ne	P	Pr	abs	neabs
0.0	0.0	92.29	1.43	6.27	0.0

Provides: PhDr. Helena Petruňová, CSc., Mgr. Zuzana Kolaříková, PhD.

Date of last modification: 06.02.2018

Approved: Co-guaranteeprof. RNDr. Vladimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.

University: P. J. Šafá	rik University in Koši	ce	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ CDC/04	rse ID: ÚCHV/ Course name: Citation in the Local Scientific Journal /04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 5	<u> </u>		
Recommended seme	ster/trimester of the	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ture:		
Course language:			
Course assessment Total number of asses	ssed students: 1		
	abs	n	
100.0 0.0		0.0	
Provides:		<u> </u>	
Date of last modifica	tion: 26.02.2018		
Approved: Co-guaran DrSc.Co-guaranteedo	-	mír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, ák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ CM/04	Course ID: ÚCHV/ Course name: Citation in the Monograph		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2	20		
Recommended seme	ster/trimester of the co	arse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 3		
	abs	n	
100.0 0.0			
Provides:			
Date of last modifica	tion: 26.02.2018		
	nteeprof. RNDr. Vladimi c. RNDr. Ivan Potočňák.	r Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, PhD	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ CZC/04			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	0		
Recommended seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 36		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	ation: 26.02.2018		
	nteeprof. RNDr. Vladimír Z c. RNDr. Ivan Potočňák. Ph	eleňák, PhD.Guaranteeprof. RNDr. Juraj Černák,	

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Bioinorganic Chemistry DBACH/13 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 credits: 9 Recommended semester/trimester of the course: Course level: III. **Prerequisities: Conditions for course completion: Learning outcomes:** Goal of the course is to provide the students with a knowledge of chemical elements in biological systems, biometals, their importance and function, biocoordination compounds, biomineralization, biominerals and biomaterials. **Brief outline of the course:** Metal complexes in living systems - metalloproteins, metalloenzymes, metallophosphates, Fe-S clusters, their function. Biometals, their transport. Ion channels, ionophores. Biological redox processes. Role of biometals in biophotochemical processes. Biominerals, biomaterials, biosenzors. Bioinorganic chemistry of toxic elements and compounds. Chemistry of elements in medicine, metal complexes in diagnostics. New trends in bioinorganic chemistry. **Recommended literature:** 1. D. F. Shriver, P. W. Atkins, T. L. Overton, J. P. Rourke, M. T. Weller, F. A. Amstrong: Inorganic Chemistry, kapitola 26. Oxford University Press, Oxford 2006. 2. C. E. Housecroft, A.G. Sharpe: Inorganic Chemistry, kapitola 28. Pearson Education, Harlow 2005 3. C. M. Lukehart, R. A. Scott: Nanomaterials: Inorganic and Bioinorganic Perspectives, kapitoly 1-5. J. Wiley, Chichester 2008. 4. W. Kaim, B. Schvederski: Bioinorganic Chemistry, J. Wiley&Sons, New York 1994. 5. J. C. Dabrowiak: Metals in Medicine. J. Wiley&Sons, Chichester 2009. Course language: Course assessment Total number of assessed students: 6 N P

100.0

0.0

Provides: doc. RNDr. Zuzana Vargová, Ph.D.

Date of last modification: 26.02.2018

Approved: Co-guaranteeprof. RNDr. Vladimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ DCKOK/13		
Course method: pre	re / Practice rse-load (hours): study period: 42 / 14 esent	
Number of credits: 9		
Recommended seme	ster/trimester of the cours	e:
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	iture:	
Course language:		
Course assessment Total number of asse	ssed students: 7	
	N	P
0.0 100.0		
Provides: prof. RND	r. Juraj Černák, DrSc., RND	r. Martin Vavra, PhD.
Date of last modifica	ation: 26.02.2018	
Approved: Co-guara	nteeprof. RNDr. Vladimír Z	eleňák, PhD.Guaranteeprof. RNDr. Juraj Černák,

DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ Course name: Chémia nanomateriálov DCNM/13			
Course type, scope a Course type: Lectur Recommended cour Per week: 3 / 1 Per Course method: pre	re / Practice rse-load (hours): study period: 42 / 14		
Number of credits: 9)		
Recommended seme	ster/trimester of the cours	2:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 4		
	N	P	
	0.0 100.0		
Provides: prof. RND:	r. Vladimír Zeleňák, PhD.		
Date of last modifica	tion: 26.02.2018		
	nteeprof. RNDr. Vladimír Z c. RNDr. Ivan Potočňák. Ph	eleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, D.	

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Diffraction methods

DDM/13

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 4 Per study period: 28 / 56

Course method: present

Number of credits: 9

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

2 written tests

30%

Written test, oral examination, solution of the crystal structure and processing the results in the form of text, tables and structural diagram (figure).

Learning outcomes:

PhD. student handles both theoretical and practical aspects of single crystal structural analysis, and powder diffraction. He is able to solve independently crystal structures by a method of single crystal structural analysis and to evaluate powder diffraction records and use the results of these methods in his work.

Brief outline of the course:

Macrostructure and microstructure symmetry, individual work with space groups. Theoretical basis of the diffraction experiment. Practical aspects of crystal structure solution. Processing the results of structural analysis. Theoretical basis, practical aspects and possibilities of X-ray powder diffraction analysis, its use at work of an inorganic chemist.

Recommended literature:

Massa, W.: Crystal structure determination. Springer 2000.

Clegg, W. et al.: Crystal structure analysis. Principles and practice. Oxford University Press 2009. Stout, G.H. & Jensen, L.H.: X-ray Structure Determination. Macmillan Publishing Co., Inc. 1968. Klug, H.P. & Alexander, L.E.: X-Ray diffraction procedures for polycrystalline and amorphous materials. John Wiley & Sons, Inc. 1970.

Hahn, T.: International tables for crystallography, Vol. A. Kluwer Academic Publishers 2002. Manuals for programs.

Course language:

Course assessment

Total number of assessed students: 10

N	P	abs	neabs
0.0	30.0	70.0	0.0

Provides: doc. RNDr. Ivan Potočňák, PhD.

Date of last modification: 26.02.2018

Approved: Co-guaranteeprof. RNDr. Vladimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák,

DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DK/04			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2	2		
Recommended seme	ster/trimester of the	e course:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 95		
	abs	n	
100.0 0.0			
Provides:		•	
Date of last modifica	ition: 26.02.2018		
Approved: Co-guara DrSc.Co-guaranteedo	_	limír Zeleňák, PhD.Guaranteeprof. ňák, PhD.	RNDr. Juraj Černák,

University: P. J. Šafá	rik University in Ko	šice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DKC/04	ourse ID: ÚCHV/ Course name: Local Currented Journal KC/04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	5		
Recommended seme	ster/trimester of the	e course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 10		
	abs	n	
	100.0 0.0		
Provides:		·	
Date of last modifica	tion: 26.02.2018		
Approved: Co-guara: DrSc.Co-guaranteedo	*	dimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, ňák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DKZU/04	Course name: Local Conference with Foreign Participation		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 4			
Recommended seme	ster/trimester of the co	urse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asses	ssed students: 185		
	abs	n	
100.0 0.0		0.0	
Provides:			
Date of last modifica	tion: 26.02.2018		
	nteeprof. RNDr. Vladim c. RNDr. Ivan Potočňák	ír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DMAL/13	Course ID: ÚCHV/ Course name: Magnetochemistry of Inorganic Compounds OMAL/13		
Course type, scope a Course type: Lectur Recommended cour Per week: 3 / 1 Per Course method: pre	re / Practice rse-load (hours): study period: 42 / 14		
Number of credits: 9)		
Recommended seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 3		
	N	P	
0.0 100.0		100.0	
Provides: doc. RNDr	. Alžbeta Orendáčová, DrSc		
Date of last modifica	tion: 26.02.2018		
	nteeprof. RNDr. Vladimír Z c. RNDr. Ivan Potočňák. Ph	eleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, D.	

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Molekulové inkluzívne zlúčeniny

DMIZ/13

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 credits: 9

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Goal of the course is to provide the PhD students with a knowledge of inclusion compounds and supramolecular chemistry from the point of view of their physicochemical properties, structure and application

Brief outline of the course:

Different types of inclusion compounds (host-gestures compounds), types of interactions, structure, properties. Materials on base of inclusion compounds and their application in various areas of practice, in industry, agriculture, environment (sorbents, carriers of biochemical, pharmaceutical and agrochemical substances). Materials with electrochromic and photochromic properties.

Recommended literature:

- 1. J. W. Steed, J. L. Atwood: Supramolecular Chemistry, J. Wiley, Chichester 2002.
- 2. J. L. Atwood, J. E. Davies: Inclusion compounds, Oxford University Press, Oxford 1984.
- 3. D. Cram, J. M. Cram: Container molecules and their guests, RSC, Cambridge 1994.
- 4. J. W. Steed, D. R.Turner, K. J. Wallace: Core Concepts in Supramolecular Chemistry and Nanochemistry. Wiley, Chichester 2007.

Course language:

Course assessment

Total number of assessed students: 2

N	P
0.0	100.0

Provides: prof. RNDr. Juraj Černák, DrSc., RNDr. Miroslava Matiková-Maľarová, PhD.

Date of last modification: 26.02.2018

Approved: Co-guaranteeprof. RNDr. Vladimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.

University: P. J. Šafá	rik University in Košio	ee	
Faculty: Faculty of Science			
Course ID: ÚCHV/ DNC/04	Course ID: ÚCHV/ Course name: Local Non-Currented Journal ONC/04		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 5	<u>, </u>		
Recommended seme	ster/trimester of the o	course:	
Course level: III.	Course level: III.		
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	Brief outline of the course:		
Recommended literature:			
Course language:	Course language:		
Course assessment Total number of asse	ssed students: 17		
	abs	n	
	100.0	0.0	
Provides:			
Date of last modification: 26.02.2018			
	nteeprof. RNDr. Vladi c. RNDr. Ivan Potočňá	mír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, k, PhD.	

University: P. J. Šafá	rik University in Koši	ce
Faculty: Faculty of Science		
Course ID: ÚCHV/ DPACH/13	Course ID: ÚCHV/ Course name: Pokročilá anorganická chémia DPACH/13	
Course type, scope a Course type: Lectur Recommended cou Per week: 4 Per stu Course method: pre	re rse-load (hours): dy period: 56	
Number of credits: 9)	
Recommended seme	ster/trimester of the	course: 1., 3.
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the course:		
Recommended literature:		
Course language:		
Course assessment Total number of asse	ssed students: 10	
	N	P
	0.0	100.0
Provides: prof. RND	r. Juraj Černák, DrSc.	<u> </u>
Date of last modifica	ation: 26.02.2018	
Approved: Co-guara	*	mír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák,

University: P. J. Šafá	rik University in Košic	e
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ DSRM/13		
Course method: pre	re / Practice rse-load (hours): study period: 28 / 28 esent	
Number of credits: 9		
	ster/trimester of the c	ourse:
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	nture:	
Course language:		
Course assessment Total number of asse	ssed students: 8	
	N	P
	0.0	100.0
Provides: doc. RNDr	. Juraj Kuchár, PhD.	•
Date of last modifica	ation: 26.02.2018	
11	nteeprof. RNDr. Vladin c. RNDr. Ivan Potočňá	nír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, k, PhD.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ **Course name:** Thermal and r

DTA/13

Course name: Thermal and mechanical properties of inorganic compounds

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours): Per week: 3 / 1 Per study period: 42 / 14

Course method: present

Number of credits: 9

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Goal of the course is to provide the students with a knowledge of the basic principles and methods of thermal analysis for characterization of solid substances and study of their reactive mechanism.

Brief outline of the course:

The basic principles and methods of thermal analysis (TG/DTG, DTA, TMA, ETA, EGA etc.) for characterization of solid substances and study of their reactive mechanism and changes of their properties in dependence on temperature.

Recommended literature:

K. Györyová: Termická analýza, Edičné stredisko PF UPJŠ, Košice 1992

P.J.Haines: Thermal Methods of Analysis, Ef. Blackie, London 1995

F.Paulik: Special Trends in Thermal Analysis, John Wiley&Sons, New York 1995

Course language:

Course assessment

Total number of assessed students: 3

N	P
0.0	100.0

Provides: prof. RNDr. Vladimír Zeleňák, PhD.

Date of last modification: 26.02.2018

Approved: Co-guaranteeprof. RNDr. Vladimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ DZS/15			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present			
Number of credits: 5	5		
Recommended seme	ster/trimester of the cours	e: 3., 4	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	nture:		
Course language:	Course language:		
Course assessment Total number of assessed students: 37			
	N P		
	0.0 100.0		
Provides:			
Date of last modification: 21.09.2017			
Approved: Co-guaranteeprof. RNDr. Vladimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.			

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ IG/04	ourse ID: ÚCHV/ Course name: Acquirement of Internal Grant G/04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	0		
Recommended seme	ster/trimester of the cours	e: 6., 8.	
Course level: III.			
Prerequisities:			
Conditions for cours	Conditions for course completion:		
Learning outcomes:			
Brief outline of the c	Brief outline of the course:		
Recommended literature:			
Course language:	Course language:		
Course assessment Total number of asse	ssed students: 173		
	abs	n	
	100.0	0.0	
Provides: prof. RNDr. Jozef Gonda, DrSc.			
Date of last modifica	tion: 26.02.2018		
	nteeprof. RNDr. Vladimír Z c. RNDr. Ivan Potočňák, Ph	eleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, D.	

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of Science		
Course ID: Dek. PF UPJŠ/JSD/14	Course ID: Dek. PF Course name: Spring School for PhD Students JPJŠ/JSD/14	
Course type, scope a Course type: Lectur Recommended cour Per week: Per stud Course method: pre	re rse-load (hours): y period: 4d	
Number of credits: 2	<u> </u>	
Recommended seme	ster/trimester of the co	ourse:
Course level: III.		
Prerequisities:		
Conditions for course completion:		
Learning outcomes:		
Brief outline of the course:		
Recommended literature:		
Course language:	Course language:	
Course assessment Total number of asse	ssed students: 121	
	abs	n
	100.0 0.0	
Provides: prof. RNDr. Katarína Cechlárová, DrSc.		
Date of last modifica	tion: 19.02.2018	
	nteeprof. RNDr. Vladim	ír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák,

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ MK/04			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 6			
Recommended seme	ster/trimester of the co	urse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended literature:			
Course language:			
Course assessment Total number of asse	ssed students: 195		
	abs n		
100.0 0.0			
Provides:			
Date of last modification: 26.02.2018			
	nteeprof. RNDr. Vladimi c. RNDr. Ivan Potočňák.	r Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černa PhD.	ák,

University: P. J. Šafá	rik University in Kos	šice	
Faculty: Faculty of Science			
Course ID: ÚCHV/ NEM/04	M/04 Course name: Introduction of a New Experimental Method		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1	5		
Recommended seme	ster/trimester of the	e course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	Brief outline of the course:		
Recommended litera	Recommended literature:		
Course language:			
Course assessment Total number of asse	ssed students: 7		
	abs	n	
	100.0	0.0	
Provides:			
Date of last modifica	tion: 26.02.2018		
Approved: Co-guara DrSc.Co-guaranteedo	*	dimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, ňák, PhD.	

University, D. I. Čefé	rik University in Kočica	
University: P. J. Šafárik University in Košice		
Faculty: Faculty of S	cience	
Course ID: ÚCHV/	urse ID: ÚCHV/ Course name: Not-Reviewed International or Local Proceedings	
NZ/04		
Course type, scope a	nd the method:	
Course type:		
Recommended cou	` ,	
Per week: Per stud	v 1	
Course method: pre	esent	
Number of credits: 2		
Recommended seme	ster/trimester of the cour	se:
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the course:		
Recommended literature:		
Course language:		
Course assessment		
Total number of assessed students: 162		
	abs	n
	100.0	0.0
Provides:		
Date of last modification: 26.02.2018		
	nteeprof. RNDr. Vladimír Z c. RNDr. Ivan Potočňák. Pl	Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák,

University: P. J. Šafárik University in Košice			
Faculty: Faculty of Science			
Course ID: ÚCHV/ ODZP/2014/15	\mathbf{J}		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 3	0		
Recommended seme	ster/trimester of the co	urse:	
Course level: III.			
Prerequisities:			
Conditions for course completion:			
Learning outcomes:			
Brief outline of the c	Brief outline of the course:		
Recommended literature:			
Course language:	Course language:		
Course assessment Total number of asse	ssed students: 32		
	N	P	
	0.0 100.0		
Provides:			
Date of last modification: 21.09.2017			
	nteeprof. RNDr. Vladim c. RNDr. Ivan Potočňák	ír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, , PhD.	

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ PDS/18	rse ID: ÚCHV/ Course name: Writing Dissertation Work		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 1	5		
Recommended seme	ster/trimester of the	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the course:			
Recommended litera	ture:		
Course language:			
Course assessment Total number of asse	ssed students: 5		
	N P		
0.0 100.0			
Provides:		•	
Date of last modifica	tion: 17.04.2018		
Approved: Co-guara: DrSc.Co-guaranteedo	•	limír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, nák, PhD.	

University: P. J. Šafá	rik University in Košic	e	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ POVK/04	e ID: ÚCHV/ Course name: Membership in a Conference organizing Committee /04		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 2			
Recommended seme	ster/trimester of the c	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ture:		
Course language:			
Course assessment Total number of asse	ssed students: 33		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	tion: 26.02.2018		
,	nteeprof. RNDr. Vladin c. RNDr. Ivan Potočňál	nír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, c, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ PPC/04	Course name: Direct Pedagogical Activities		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period: esent		
Number of credits: 1			
Recommended seme	ster/trimester of the co	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	Brief outline of the course:		
Recommended litera	ture:		
Course language:			
Course assessment Total number of asse	ssed students: 347		
	abs n		
	100.0 0.0		
Provides:			
Date of last modifica	tion: 26.02.2018		_
	nteeprof. RNDr. Vladim c. RNDr. Ivan Potočňák	nír Zeleňák, PhD.Guaranteeprof. RN	Dr. Juraj Černák,

University: P. J. Šafá	University: P. J. Šafárik University in Košice		
Faculty: Faculty of S	Faculty: Faculty of Science		
Course ID: ÚCHV/ PVS/04	urse ID: ÚCHV/ Course name: Patents, Inventions, Software S/04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 2			
Recommended seme	ster/trimester of the co	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	Conditions for course completion:		
Learning outcomes:			
Brief outline of the course:			
Recommended litera	ture:		
Course language:	Course language:		
Course assessment Total number of asses	ssed students: 0		
	abs		
0.0			
Provides:			
Date of last modification: 26.02.2018			
	nteeprof. RNDr. Vladim c. RNDr. Ivan Potočňák	úr Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, PhD.	

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ RZ/04	e ID: ÚCHV/ Course name: Reviewed International or Local Proceedings		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 5	; ; 		
Recommended seme	ster/trimester of the	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 265		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	tion: 26.02.2018		
Approved: Co-guara DrSc.Co-guaranteedo		limír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, ňák, PhD.	

University: P. J. Šafá	rik University in Košic	e	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ SCI/04	rrse ID: ÚCHV/ Course name: SCI Citation /04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2	20		
Recommended seme	ster/trimester of the o	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 128		
	abs	n	
	100.0 0.0		
Provides:		•	
Date of last modifica	tion: 26.02.2018		
	nteeprof. RNDr. Vladir c. RNDr. Ivan Potočňá	nír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, k, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ SDPR/04	ÚCHV/ Course name: Co-worker of a Local Project		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2	2		
Recommended seme	ster/trimester of the co	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:	•		
Brief outline of the c	course:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of asse	ssed students: 348		
	abs n		
99.71 0.29)
Provides:			
Date of last modifica	ntion: 26.02.2018		
	nteeprof. RNDr. Vladim c. RNDr. Ivan Potočňák	ír Zeleňák, PhD.Guaranteepro , PhD.	f. RNDr. Juraj Černák,

University: P. J. Šafá	University: P. J. Šafárik University in Košice		
Faculty: Faculty of S	Faculty: Faculty of Science		
Course ID: ÚCHV/ SMPR/04	· · · · · · · · · · · · · · · · · · ·		
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present			
Number of credits: 1	5		
Recommended seme	ster/trimester of the cour	se:	
Course level: III.	Course level: III.		
Prerequisities:			
Conditions for cours	Conditions for course completion:		
Learning outcomes:			
Brief outline of the course:			
Recommended literature:			
Course language:	Course language:		
Course assessment Total number of asses	ssed students: 36		
	abs		
100.0 0.0			
Provides:			
Date of last modification: 26.02.2018			
11	nteeprof. RNDr. Vladimír c. RNDr. Ivan Potočňák, P	Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, hD.	

University: P. J. Šafá	rik University in Koši	ce	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ SSOL/04	Course name: Indivi	Course name: Individual Study of Scientific Literature	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 2			
Recommended seme	ster/trimester of the	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	Conditions for course completion:		
Learning outcomes:			
Brief outline of the course:			
Recommended litera	ture:		
Course language:			
Course assessment Total number of asse	ssed students: 180		
	abs		
	100.0 0.0		
Provides:			
Date of last modifica	tion: 26.02.2018		
	nteeprof. RNDr. Vladi c. RNDr. Ivan Potočňa	mír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, ák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ VBP/04	ÚCHV/ Course name: Supervision of Bachelor Thesis		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 6	,		
Recommended seme	ster/trimester of the cours	e: 6., 8.	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 282		
	abs	n	
	100.0 0.0		
Provides: prof. RND:	r. Jozef Gonda, DrSc.		
Date of last modifica	tion: 26.02.2018		
	nteeprof. RNDr. Vladimír Z c. RNDr. Ivan Potočňák, Ph	eleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, D.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ VPBP/04	Course name: Review of a Bachelor Thesis		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2			
Recommended seme	ster/trimester of the co	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 60		
	abs	n	
	100.0 0.0		
Provides:		•	
Date of last modifica	tion: 26.02.2018		
	nteeprof. RNDr. Vladim c. RNDr. Ivan Potočňák	ír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ VPSV/04	Course name: Supervision of a Students Scientific Work		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 6			
Recommended seme	ster/trimester of the co	ırse: 6., 8.	
Course level: III.	Course level: III.		
Prerequisities:			
Conditions for course completion:			
Learning outcomes:			
Brief outline of the course:			
Recommended literature:			
Course language:			
Course assessment Total number of asse	ssed students: 64		
	abs n		
	100.0 0.0		
Provides: prof. RND:	r. Jozef Gonda, DrSc.	·	
Date of last modifica	tion: 26.02.2018		
	nteeprof. RNDr. Vladimí c. RNDr. Ivan Potočňák,	r Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, PhD.	

University: P. J. Šafá	rik University in Košio	ce		
Faculty: Faculty of S	cience			
Course ID: ÚCHV/ VYS/04	Course name: Presentation in Seminar			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:			
Number of credits: 2				
Recommended semester/trimester of the course:				
Course level: III.				
Prerequisities:	Prerequisities:			
Conditions for course completion:				
Learning outcomes:				
Brief outline of the course:				
Recommended literature:				
Course language:				
Course assessment Total number of asses	ssed students: 173			
	abs		n	
	100.0		0.0	
Provides: prof. RND	r. Jozef Gonda, DrSc.	•		
Date of last modifica	tion: 26.02.2018			
	nteeprof. RNDr. Vladi c. RNDr. Ivan Potočňá		uaranteeprof. R	NDr. Juraj Černák,

University: P. J. Šafá	rik University in Ko	ošice		
Faculty: Faculty of S	cience			
Course ID: ÚCHV/ ZKC/04	V/ Course name: International Currented Journal			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:			
Number of credits: 20				
Recommended semester/trimester of the course:				
Course level: III.				
Prerequisities:	Prerequisities:			
Conditions for course completion:				
Learning outcomes:				
Brief outline of the course:				
Recommended literature:				
Course language:				
Course assessment Total number of asse	ssed students: 244			
	abs	n		
	99.59	0.41		
Provides:		·		
Date of last modification: 26.02.2018				
Approved: Co-guara	*	adimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák,		

University: P. J. Šafá	rik University in Koš	iice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ ZNC/04	ÚCHV/ Course name: International Non-Currented Journal		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 5			
Recommended semester/trimester of the course:			
Course level: III.			
Prerequisities:			
Conditions for course completion:			
Learning outcomes:			
Brief outline of the course:			
Recommended literature:			
Course language:			
Course assessment Total number of asse	ssed students: 16		
	abs	n	
	100.0	0.0	
Provides:		<u>.</u>	
Date of last modifica	ition: 26.02.2018		
Approved: Co-guara DrSc.Co-guaranteedo		limír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, ňák, PhD.	

University: P. J. Šafá	rik University in Košice			
Faculty: Faculty of S	cience			
Course ID: ÚCHV/ ZSP/04	Course name: Study Stay Abroad			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:			
Number of credits: 2	Number of credits: 2			
Recommended semester/trimester of the course: 6., 8.				
Course level: III.				
Prerequisities:	Prerequisities:			
Conditions for course completion:				
Learning outcomes:				
Brief outline of the course:				
Recommended literature:				
Course language:				
Course assessment Total number of assessed students: 75				
	abs	n		
	100.0	0.0		
Provides:				
Date of last modification: 26.02.2018				
Approved: Co-guaranteeprof. RNDr. Vladimír Zeleňák, PhD.Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.				