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: 525

N	Ne	P	Pr	abs	neabs
0.0	0.0	58.29	0.0	41.71	0.0

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

Date of last modification: 04.10.2016

Approved: Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák,

PhD.Co-guaranteedoc. RNDr. Vladimír Zeleňák, 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: 528

N	Ne	Р	Pr	abs	neabs
0.0	0.0	91.86	1.52	6.63	0.0

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

Date of last modification: 04.10.2016

Approved: Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák,

PhD.Co-guaranteedoc. RNDr. Vladimír Zeleňák, PhD.

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ CDC/04	Course name: Citation in the Local Scientific Journal	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:	
Number of credits: 5	<u> </u>	
Recommended seme	ster/trimester of the cou	rse:
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: 1	
	abs	n
100.0 0.0		
Provides:		·
Date of last modifica	ation: 27.02.2017	
* *	eprof. RNDr. Juraj Černál c. RNDr. Vladimír Zeleňá	r, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, k, PhD.

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ CM/04	se ID: ÚCHV/ Course name: Citation in the Monograph		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 2	20		
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: 3		
	abs n		
100.0 0.0			
Provides:		•	
Date of last modifica	tion: 27.02.2017		
Approved: Guarantee PhD.Co-guaranteedoo		ernák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, leňák PhD	

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ CZC/04	Course name: Citation in the International Scientific Journal	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:	
Number of credits: 1	0	
Recommended seme	ster/trimester of the cou	irse:
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: 31	
	abs	n
100.0 0.0		
Provides:		•
Date of last modifica	tion: 27.02.2017	
* *	eprof. RNDr. Juraj Černá e. RNDr. Vladimír Zeleňá	k, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, k, PhD.

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: 4

N	P
0.0	100.0

Provides: prof. RNDr. Katarína Györyová, DrSc., doc. RNDr. Zuzana Vargová, Ph.D.

Date of last modification: 24.02.2017

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

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ DCKOK/13	Course name: Chemistry of Coordination, Organometallic and Cluster Compounds		
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:	Prerequisities:		
Conditions for cours	Conditions for course completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 6		
	N	P	
	0.0 100.0		
Provides: prof. RNDr. Juraj Černák, DrSc., RNDr. Martin Vavra, PhD.			
Date of last modifica	ation: 24.02.2017		
1 1	eprof. RNDr. Juraj Černák, l c. RNDr. Vladimír Zeleňák,	DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.	

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ DCNM/13	D: ÚCHV/ Course name: Chémia nanomateriálov	
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	se completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	nture:	
Course language:		
Course assessment Total number of asse	ssed students: 3	
	N	P
0.0 100.0		
Provides: doc. RNDr. Vladimír Zeleňák, PhD.		
Date of last modifica	ation: 24.02.2017	
* *	eprof. RNDr. Juraj Černák, l c. RNDr. Vladimír Zeleňák,	DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

DDM/13

Course name: Diffraction methods

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: 7

N	P	abs	neabs
0.0	42.86	57.14	0.0

Provides: doc. RNDr. Ivan Potočňák, PhD.

Date of last modification: 24.02.2017

Approved: Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák,

PhD.Co-guaranteedoc. RNDr. Vladimír Zeleňák, PhD.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DK/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 cours	:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asses	ssed students: 91		
	abs	n	
100.0 0.0			
Provides:			
Date of last modifica	tion: 27.02.2017		
* *	eprof. RNDr. Juraj Černák, I e. RNDr. Vladimír Zeleňák,	OrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DKC/04	: ÚCHV/ Course name: Local 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: 1	5		
Recommended seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	Conditions for course completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	nture:		
Course language:			
Course assessment Total number of asse	ssed students: 10		
	abs n		
100.0 0.0			
Provides:			
Date of last modifica	ation: 27.02.2017		
	eprof. RNDr. Juraj Černák, e. RNDr. Vladimír Zeleňák,	DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, 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	ļ		
Recommended seme	ster/trimester of the co	urse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	course:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 175		
	abs	n	
	100.0 0.0		
Provides:		•	
Date of last modifica	ition: 27.02.2017		
	eprof. RNDr. Juraj Černá c. RNDr. Vladimír Zeleňa	ık, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, ák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DMAL/13	JCHV/ Course name: Magnetochemistry of Inorganic Compounds		
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	Brief outline of the course:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 2		
	N P		
	0.0 100.0		
Provides: doc. RNDr	. Alžbeta Orendáčová, DrSc		
Date of last modifica	tion: 24.02.2017		
1 1	eprof. RNDr. Juraj Černák, I 2. RNDr. Vladimír Zeleňák.	DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.	

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: 0

N	P
0.0	0.0

Provides: prof. RNDr. Juraj Černák, DrSc., doc. RNDr. Zuzana Vargová, Ph.D.

Date of last modification: 24.02.2017

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

University: P. J. Šafá	University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ DNC/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			
Recommended seme	ster/trimester of the cou	rse:	
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: 17		
	abs n		
100.0 0.0			
Provides:			
Date of last modification: 27.02.2017			
* *	eprof. RNDr. Juraj Černák e. RNDr. Vladimír Zeleňál	, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, s, PhD.	

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DPACH/13	rse ID: ÚCHV/ Course name: Pokročilá anorganická chémia		
Course type, scope a Course type: Lectur Recommended cour Per week: 4 Per stu Course method: pre	re rse-load (hours): idy period: 56		
Number of credits: 9)		
Recommended seme	ster/trimester of the	e course:	
Course level: III.			
Prerequisities:			
Conditions for cours	Conditions for course completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ature:		
Course language:			
Course assessment Total number of asse	ssed students: 7		
	N P		
	0.0 100.0		
Provides: prof. RND:	r. Juraj Černák, DrSc		
Date of last modifica	ntion: 24.02.2017		
Approved: Guarantee PhD.Co-guaranteedoo		ernák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, eleňák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DSRM/13	j 5 C		
Course type, scope a Course type: Lectur Recommended cour Per week: 2 / 2 Per Course method: pre	re / Practice rse-load (hours): study period: 28 / 28		
Number of credits: 9			
Recommended seme	ster/trimester of the cour	se:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	ourse:		
Recommended literature:			
Course language:			
Course assessment Total number of asse	ssed students: 7		
	N P		
0.0 100.0			
Provides: doc. RNDr. Juraj Kuchár, PhD.			
Date of last modifica	tion: 24.02.2017		
1 1	eprof. RNDr. Juraj Černák, 2. RNDr. Vladimír Zeleňák	DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.	

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Thermal and mechanical properties of inorganic compounds

DTA/13

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: 2

N	P
0.0	100.0

Provides: doc. RNDr. Vladimír Zeleňák, PhD.

Date of last modification: 24.02.2017

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

University: P. J. Šafá	University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ DZS/15	e ID: ÚCHV/ Course name: Doctoral Exam		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 5	; 		
Recommended seme	ster/trimester of the co	urse: 3., 4	
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: 27		
	N P		
0.0 100.0			
Provides:			
Date of last modification: 24.02.2017			
Approved: Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.Co-guaranteedoc. RNDr. Vladimír Zeleňák, PhD.			

University: P. J. Šafá	University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ IG/04	urse ID: ÚCHV/ Course name: Acquirement of Internal Grant		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1			
Recommended seme	ster/trimester of the cou	irse: 6., 8.	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended literature:			
Course language:			
Course assessment Total number of asses	ssed students: 163		
	abs n		
100.0 0.0			
Provides:			
Date of last modification: 27.02.2017			
	eprof. RNDr. Juraj Černá c. RNDr. Vladimír Zeleňá	k, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák,	

University: P. J. Šafárik University in Košice			
Faculty: Faculty of Science			
Course ID: Dek. PF UPJŠ/JSD/14	ID: Dek. PF Course name: Spring School for PhD Students SD/14		
Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 4d Course method: present			
Number of credits: 2			
Recommended seme	ster/trimester of the cours	e:	
Course level: III.	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 assessed students: 115			
	abs n		
100.0 0.0			
Provides: doc. RNDr. Vladimír Zeleňák, PhD.			
Date of last modification: 13.02.2017			
Approved: Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.Co-guaranteedoc. RNDr. Vladimír Zeleňák, PhD.			

University: P. J. Šafá	University: P. J. Šafárik 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): ly period:		
Number of credits: 6	<u> </u>		
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	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 182		
abs n			
100.0 0.0			
Provides:			
Date of last modification: 27.02.2017			
* *	eprof. RNDr. Juraj Čeri e. RNDr. Vladimír Zele	nák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, ňák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ NEM/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): y period:		
Number of credits: 1	5		
Recommended seme	ster/trimester of the cou	rse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended literature:			
Course language:	Course language:		
Course assessment Total number of asse	ssed students: 7		
	abs n		
100.0 0.0			
Provides:		-	
Date of last modifica	tion: 27.02.2017		
* *	eprof. RNDr. Juraj Černák e. RNDr. Vladimír Zeleňá	z, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, k, PhD.	

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ NZ/04	: ÚCHV/ Course name: Not-Reviewed International or Local Proceedings	
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 literature:		
Course language:		
Course assessment Total number of asse	ssed students: 156	
abs n		
100.0 0.0		
Provides:		
Date of last modifica	tion: 27.02.2017	
* *	eprof. RNDr. Juraj Čern c. RNDr. Vladimír Zelej	ák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák,

University: P. J. Šafárik University in Košice			
Faculty: Faculty of S	Faculty: Faculty of Science		
Course ID: ÚCHV/ ODZP/2014/15	J J1		
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present			
Number of credits: 3	0		
Recommended seme	ster/trimester of the cou	rse:	
Course level: III.			
Prerequisities:			
Conditions for cours	Conditions for course completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended literature:			
Course language:			
Course assessment Total number of asses	ssed students: 27		
	N P		
0.0 100.0			
Provides:			
Date of last modification: 24.02.2017			
Approved: Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.Co-guaranteedoc. RNDr. Vladimír Zeleňák, PhD.			

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ PDS/14	D: 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 co	urse:	
Course level: III.	Course level: III.		
Prerequisities:			
Conditions for cours	Conditions for course completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the course:			
Recommended literature:			
Course language:	Course language:		
Course assessment Total number of asse	ssed students: 31		
	abs		
100.0 0.0			
Provides:			
Date of last modifica	tion: 27.02.2017		
* *	eprof. RNDr. Juraj Černa e. RNDr. Vladimír Zeleň	ák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, ák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ POVK/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			
Recommended seme	ster/trimester of the cours	e:	
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: 31		
	abs		
100.0 0.0			
Provides:			
Date of last modifica	tion: 27.02.2017		
* *	eprof. RNDr. Juraj Černák, I c. RNDr. Vladimír Zeleňák,	DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, 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 cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of credits: 1			
Recommended seme	ster/trimester of the co	ırse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 329		
	abs n		
	100.0 0.0		
Provides:		<u> </u>	
Date of last modifica	ation: 27.02.2017		
* *	eprof. RNDr. Juraj Černá c. RNDr. Vladimír Zeleňa	k, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, lk, PhD.	

University: P. J. Šafá	rik University in Koši	ce	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ PVS/04	rse ID: ÚCHV/ Course name: Patents, Inventions, Software		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): y period: esent		
Number of credits: 2			
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 asse	ssed students: 0		
	abs n		
	0.0		
Provides:		•	
Date of last modifica	tion: 27.02.2017		
Approved: Guarantee PhD.Co-guaranteedoo	1	rnák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, leňák, PhD.	

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ RZ/04	ourse ID: ÚCHV/ Course name: Reviewed International or Local Proceedings 7/04		
Course type, scope a Course type: Recommended cour 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 course completion:			
Learning outcomes:			
Brief outline of the course:			
Recommended literature:			
Course language:			
Course assessment Total number of asses	ssed students: 240		
	abs n		
100.0 0.0			
Provides:		<u> </u>	
Date of last modifica	tion: 27.02.2017		
Approved: Guarantee	1	ernák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák,	

University: P. J. Šafá	rik University in Koši	ce	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ SCI/04	Course name: SCI (Citation	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period: esent		
Number of credits: 2			
Course level: III.	ster/trimester of the	course:	
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: 109		
	abs n		
	100.0 0.0		
Provides:			
Date of last modifica	tion: 27.02.2017		
* *	eprof. RNDr. Juraj Čer e. RNDr. Vladimír Zel	rnák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, eňák, PhD.	

University: P. J. Šafá	rik University in Košice	;	
Faculty: Faculty of Science			
Course ID: ÚCHV/ SDPR/04	Course name: Co-worker of a Local Project		
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 c	ourse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:	Learning outcomes:		
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 328		
	abs n		
	99.7 0.3		
Provides:		<u> </u>	
Date of last modifica	tion: 27.02.2017		
	eprof. RNDr. Juraj Čerr e. RNDr. Vladimír Zele	ák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, nák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ SMPR/04	CHV/ Course name: Co-worker of an International Project		
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 cours	2:	
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: 32		
	abs n		
	100.0 0.0		
Provides:			
Date of last modifica	tion: 27.02.2017		
* *	eprof. RNDr. Juraj Černák, I e. RNDr. Vladimír Zeleňák,	DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ SSOL/04	IV/ 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 cou	rse:	
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 asse	ssed students: 176		
	abs		
100.0 0.0			
Provides:		•	
Date of last modifica	tion: 27.02.2017		
* *	eprof. RNDr. Juraj Černá e. RNDr. Vladimír Zeleňá	k, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, k, PhD.	

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ VBP/04	Course name: Supervision of Bachelor Thesis		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of credits: 6			
Recommended seme	ster/trimester of the	course: 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 litera	iture:		
Course language:			
Course assessment Total number of asse	ssed students: 273		
	abs n		
100.0 0.0			
Provides:		·	
Date of last modifica	tion: 27.02.2017		
	eprof. RNDr. Juraj Če	ernák, DrSc.Co-guaranteedoc. RN leňák, PhD	NDr. Ivan Potočňák,

University: P. J. Šafá	rik University in Koš	ice	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ VPBP/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			
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 literature:			
Course language:			
Course assessment Total number of asse	ssed students: 58		
	abs n		
100.0 0.0			
Provides:		·	
Date of last modifica	tion: 27.02.2017		
Approved: Guarantee PhD.Co-guaranteedoo		rnák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, leňák PhD	

University: P. J. Šafá	University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science			
Course ID: ÚCHV/ VPSV/04	V/ 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): ly period:		
Number of credits: 6	Number of credits: 6		
Recommended semester/trimester of the course: 6., 8.			
Course level: III.	Course level: III.		
Prerequisities:			
Conditions for course completion:			
Learning outcomes:			
Brief outline of the c	Brief outline of the course:		
Recommended litera	Recommended literature:		
Course language:			
Course assessment Total number of assessed students: 59			
	abs	n	
	100.0	0.0	
Provides:			
Date of last modification: 27.02.2017			
Approved: Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.Co-guaranteedoc. RNDr. Vladimír Zeleňák, PhD.			

University: P. J. Šafárik University in Košice			
Faculty: Faculty of Science			
Course ID: ÚCHV/ VYS/04	Course name: Presentation in Seminar		
Course type, scope a Course type: Recommended cou 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:			
Conditions for course completion:			
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended literature:			
Course language:			
Course assessment Total number of assessed students: 168			
	abs	n	
	100.0	0.0	
Provides:			
Date of last modification: 27.02.2017			
Approved: Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.Co-guaranteedoc. RNDr. Vladimír Zeleňák, PhD.			

University: P. J. Šafá	rik University in Košic	e	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ ZKC/04	Course name: International Currented Journal		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 20			
	ster/trimester of the c	ourse:	
Course level: III.			
Prerequisities:			
Conditions for course completion:			
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended literature:			
Course language:	Course language:		
Course assessment Total number of asse	ssed students: 224		
	abs	n	
	99.55	0.45	
Provides:		<u> </u>	
Date of last modifica	tion: 27.02.2017		
* *	eprof. RNDr. Juraj Čeri e. RNDr. Vladimír Zele	nák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, ňák, PhD.	

University: P. J. Šafárik University in Košice			
Faculty: Faculty of Science			
Course ID: ÚCHV/ ZNC/04	Course name: International Non-Currented Jounal		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 5			
Recommended seme	ster/trimester of the co	urse:	
Course level: III.			
Prerequisities:			
Conditions for course completion:			
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended literature:			
Course language:			
Course assessment Total number of asse	ssed students: 15		
	abs	n	
	100.0	0.0	
Provides:			
Date of last modification: 27.02.2017			
Approved: Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.Co-guaranteedoc. RNDr. Vladimír Zeleňák. PhD.			

University: P. J. Šafárik University in Košice				
Faculty: Faculty of Science				
Course ID: ÚCHV/ ZSP/04	Course name: Study Stay Abroad			
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present				
Number of credits: 2				
Recommended seme	ster/trimester of the c	ourse: 6., 8.		
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: 71				
	abs	n		
	100.0	0.0		
Provides:				
Date of last modification: 27.02.2017				
Approved: Guaranteeprof. RNDr. Juraj Černák, DrSc.Co-guaranteedoc. RNDr. Ivan Potočňák, PhD.Co-guaranteedoc. RNDr. Vladimír Zeleňák. PhD.				