CONTENT

1. Acquirement of Internal Grant	2
2. Atomic and Molecular Spectroscopy	3
3. Chemometrics and Experiment Metodics	5
4. Chromatographic Separation Methods	7
5. Citation in the International Scientific Journal	8
6. Citation in the Local Scientific Journal	9
7. Citation in the Monograph	10
8. Co-worker of a Local Project	11
9. Co-worker of an International Project	12
10. Defence of Doctoral Thesis	13
11. Direct Pedagogical Activities	14
12. Dissertation examination	15
13. Electroanalytical Chemistry	16
14. English Language for PhD Students 1	17
15. English Language for PhD Students 2	18
16. Individual Study of Scientific Literature	20
17. International Conference	21
18. International Currented Journal	22
19. International Non-Currented Jounal	23
20. Introduction of a New Experimental Method.	24
21. Local Conference	
22. Local Conference with Foreign Participation	26
23. Local Currented Journal	
24. Local Non-Currented Journal	28
25. Membership in a Conference organizing Committee	29
26. Metodológia chemickej analýzy environmentálnych systémov a biologických systémov	
27. Miniaturization of Analytical Systems	
28. Not-Reviewed International or Local Proceedings	
29. Patents, Inventions, Software	
30. Pedagogy for university teachers	
31. Presentation in Seminar.	
32. Psychology for University Lecturers	
33. Review of a Bachelor Thesis	
34. Reviewed International or Local Proceedings.	
35. SCI Citation	
36. Spring School for PhD Students	
37. Study Stay Abroad	
38. Supervision of Bachelor Thesis	
39. Supervision of a Students Scientific Work	
40. Theoretical basics of analytical chemistry	
41 Writing Dissertation Work	47

University: P. J. Šafárik University in Košice				
Faculty: Faculty of S	Faculty: Faculty of Science			
Course ID: ÚCHV/ IG/04	Course name: Acquireme	nt 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 ECTS cr	edits: 10			
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:				
Notes:				
Course assessment Total number of asse	ssed students: 179			
	abs	n		
100.0 0.0				
Provides:				
Date of last modifica	tion: 03.05.2015			
Approved: prof. Dr.	Yaroslav Bazel', DrSc.			

	COURSE INFORMATION LETTER
University: P. J. Šafár	ik University in Košice
Faculty: Faculty of Sc	vience
Course ID: ÚCHV/ AMS3/05	Course name: Atomic and Molecular Spectroscopy
Course type, scope ar Course type: Lecture Recommended cour Per week: 2 / 2 Per s Course method: pres	e / Practice se-load (hours): study period: 28 / 28 sent
Number of ECTS cre	edits: 8
Recommended semes	ster/trimester of the course: 2.
Course level: III.	
Prerequisities:	
Conditions for course	e completion:
Learning outcomes: Advanced theoretical spectroscopy.	l and practical knowledge of the methods of atomic and molecular
spectral methods dever principles, classification methods. Atomic absorption spectrosce methods based on the Absorption spectrosce Vibration-rotation spectrosce, magnetic resonance,	about atomic absorption and emission spectral methods. History of the elopment and their use in analytical practice. Optical analytical methods, ion. Theoretical principles of spectroscopy. Experimental basis of spectral ectrometry. Atomic emission spectrometry (optical emission spectrometry). spectrometry. Plasma Mass Spectrometry. Mass spectrometry. Spectral X-rays observation and observation of the released electrons. opy in the visible and UV region. Emission spectroscopy of molecules. ctroscopy in analytical chemistry. Infrared and Raman spectrometry, nuclear electron paramagnetic resonance: principles, development in analytical nand miniaturization of spectral methods. Hybrid spectral methods. Organic
Skoog D. A., et al: Pri Welz B., Sperling M.: Rios, A. Escarpa, B. S Applications. Wiley, 2	A.: Handbook of Analytical Techniques. Wiley-VCH, 2001. inciple of Instrumental Analysis, Thomson Brooks/Cole, 2007. Atomic Absorption Spectrometry, Wiley-VCH, 1998. Simonet: Miniaturization of Analytical Systems: Principles, Designs and

Course language:

Notes:

Course assessment			
Total number of assessed students: 15			
N P			
0.0	100.0		
Provides: prof. Dr. Yaroslav Bazel', DrSc., doc. Ing. Viera Vojteková, PhD.			
Date of last modification: 03.05.2015			
Approved: prof. Dr. Yaroslav Bazel', DrSc.			

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Chemometrics and Experiment Metodics

ACM3/05

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: 8

Recommended semester/trimester of the course: 1.

Course level: III.

Prerequisities:

Conditions for course completion:

On the basis of individual work.

On the basis of the continuous assessment and examination.

Learning outcomes:

Learning of the basic methodology of experimentation and statistical evaluation of the measurements.

Brief outline of the course:

The basic methodology of experimentation. The sources of the scientific information. Literature search. Choice and classification of scientific journals. The sample treatment. (sampling, measurements, evaluation of results). Knowledge acquisition of the correct and theoretically-based processing and evaluation of results of chemical analysis: Signal Processing; Calibration, Data Processing. Knowledge acquisition of the methods and methodologies for results evaluation. Decision-making statistics. Information about validation of the method, about metrology, and accreditation of the laboratories. Conception of the uncertainties of results and methods. Practical application of the theoretical knowledge gained during the course.

Recommended literature:

Brereton R. G.: Chemometrics, Wiley, 2003.

Günzler H., Wiliams A.: Handbook of Analytical Techniques. Wiley-VCH, 2001.

Course language:

Notes:

Course assessment

Total number of assessed students: 21

N	P
0.0	100.0

Provides: prof. Dr. Yaroslav Bazel', DrSc., doc. Ing. Viera Vojteková, PhD.

Date of last modification: 03.05.2015

Approved: prof. Dr. Yaroslav Bazel', DrSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Chromatographic Separation Methods CHR3/05 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: 8 Recommended semester/trimester of the course:** 2. Course level: III. **Prerequisities: Conditions for course completion: Learning outcomes:** Basic and advanced theory of chromatographic separation methods and their possibilities and use in research and analytical practice. **Brief outline of the course: Recommended literature:** Skoog D.A., Leary J.J., Principles of Instrumental Analysis, Saunders, 1997. Lehotay J., Separačné metódy v analytickej chémii, STU Bratislava 2009. Course language: **Notes:** Course assessment Total number of assessed students: 9 P N 0.0 100.0 Provides: prof. RNDr. Andrej Oriňak, PhD., doc. RNDr. Taťána Gondová, CSc. Date of last modification: 03.05.2015

Approved: prof. Dr. Yaroslav Bazel', DrSc.

University: P. J. Šafárik University in Košice				
Faculty: Faculty of S	cience			
Course ID: ÚCHV/ CZC/04	Course ID: ÚCHV/ Course name: Citation in the International Scientific Journal CZC/04			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:			
Number of ECTS cr	edits: 10			
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:				
Notes:				
Course assessment Total number of asses	ssed students: 44			
	abs	n		
	100.0	0.0		
Provides:				
Date of last modifica	tion:			
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.			

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: esent	
Number of ECTS cr		
	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:		
Notes:		
Course assessment Total number of asse	ssed students: 1	
	abs	n
	100.0	0.0
Provides:		
Date of last modifica	ntion:	
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ CM/04	Course name: Citation i	n the Monograph	
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of ECTS cr	edits: 20		
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	iture:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 3		
	abs	n	
100.0 0.0			
Provides:		•	
Date of last modifica	tion:		
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
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: esent		
Number of ECTS cr			
	ster/trimester of the cour	se:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	nture:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 399		
	abs	n	
	99.75 0.25		
Provides:		•	
Date of last modifica	tion:		
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.		

University: P. J. Šafárik University in Košice				
Faculty: Faculty of S	Faculty: Faculty of Science			
Course ID: ÚCHV/ SMPR/04	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): ly period: esent			
Number of ECTS cr	edits: 15			
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:				
Notes:				
Course assessment Total number of asses	ssed students: 38			
	abs	n		
100.0 0.0				
Provides:				
Date of last modifica	tion:			
Approved: prof. Dr.	Yaroslav Bazel', DrSc.			

University: P. J. Šafárik University in Košice			
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ ODZP/2014/15	Course name: Defence o	f Doctoral Thesis	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period: esent		
Number of ECTS cr			
Recommended seme	ster/trimester of the cour	·se:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Notes:			
Course assessment Total number of asses	ssed students: 43		
	N	P	
0.0 100.0			
Provides:			
Date of last modifica	tion: 03.05.2015		
Approved: prof. Dr.	Yaroslav Bazel', DrSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ PPC/04	Course name: Direct Ped	agogical Activities	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of ECTS cr			
	ster/trimester of the cour	se:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 381		
	abs	n	
100.0 0.0			
Provides:			
Date of last modifica	ition:		
Approved: prof Dr	Yaroslav Bazel' DrSc		

University: P. J. Šafá	rik University in Košice				
Faculty: Faculty of S	cience				
Course ID: ÚCHV/ DZS/15	Course name: Dissertat	ion examination			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period: esent				
Number of ECTS cr					
	ster/trimester of the cou	irse:			
Course level: III.					
Prerequisities:					
Conditions for cours	se completion:				
Learning outcomes:					
Brief outline of the c	ourse:				
Recommended litera	iture:				
Course language:					
Notes:					
Course assessment Total number of asse	ssed students: 46				
	N	P			
	0.0 100.0				
Provides:					
Date of last modifica	tion: 03.05.2015				
Approved: prof Dr	Yaroslav Bazel' DrSc				

University: P. J. Šafárik University in Košice					
Faculty: Faculty of S	Faculty: Faculty of Science				
Course ID: ÚCHV/ EACH3/05	Course name: Electroanaly	ytical Chemistry			
Course method: pre	re / Practice rse-load (hours): study period: 28 / 28 esent				
Number of ECTS cr					
	ster/trimester of the course	e: 4.			
Course level: III.					
Prerequisities:					
Conditions for cours	se completion:				
Learning outcomes:					
Brief outline of the c	ourse:				
Recommended litera	iture:				
Course language:					
Notes:					
Course assessment Total number of asses	ssed students: 3				
	N	Р			
	0.0 100.0				
Provides: doc. RNDr	. Andrea Straková Fedorkov	á, PhD.			
Date of last modifica	ation: 20.09.2017				
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.				

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 ECTS credits: 2

Recommended semester/trimester of the course: 1.

Course level: III.

Prerequisities:

Conditions for course completion:

Written assignments - professional CV, short academic biography (200-350 words).

distance mode of instruction using MS teams

Learning outcomes:

Brief outline of the course:

Recommended literature:

Course language:

Notes:

Course assessment

Total number of assessed students: 649

N	Ne	P	Pr	abs	neabs
0.0	0.0	51.31	0.0	48.69	0.0

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

Date of last modification: 11.02.2021

Approved: prof. Dr. Yaroslav Bazel', DrSc.

Page: 17

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 ECTS credits: 3

Recommended semester/trimester of the course: 2.

Course level: III.

Prerequisities:

Conditions for course completion:

Distance mode of instruction. Online consultations.

Test, oral exam in accordance with the exam requirements (https://www.upjs.sk/filozoficka-fakulta/cjp/doktorandi-upjs/)

Learning outcomes:

Development of students' language skills, improvement of students' linguistic competencies (selected aspects of English pronunciation, vocabulary and syntax), development of students's pragmatic competence (selected aspects of functional grammar) with focus on English for academic and specific purposes. B2/C1 level of lanuage competence (according to CEFR.)

Brief outline of the course:

Specific aspecs of academic and professional English with focus on vocabulary development (noun and verb collocations, phrasal verbs, prepositional phrases, word-formation, formal/informal language, etc.), selected aspects of English grammar (prepositions, grammar tenses, passive voice, etc.), selected functional grammar (expressing opinion, cause/effect, arguments, examples, etc.). Academic communication. Cross-language interference.

Recommended literature:

Kolaříková, Z., Petruňová, H., Timková, R.: Angličtina v akademickom prostredí (cvičebnica). UPJŠ Košice, 2015

McCarthy, M., O'Dell, F.: Academic Vocabulary in Use. CUP, 2008

Štepánek, L., J. De Haff a kol.: Academic English-Akademická angličtina. Grada Publishing, a.s., 2011

Blašková, K.: Handbook of English for Postgraduate Students. Vyd. SPRINT Bratislava, 2007

Dušková, L. a kol.: Hovorová angličtina pre vedeckých a odborných pracovníkov. Veda.

Bratislava, 1982

Armer, T.: Cambridge English for Scientists. CUP, 2011

Porter, D.: Check your vocabulary for Academic English. Macmillan Publishers Limited, 2008

Oxford Collocations Dictionary for students of English. OUP, 2002

lms.upjs.sk

Course language:

B2/C1 level according to CEFR

Notes:

Course assessment

Total number of assessed students: 607

N	Ne	Р	Pr	abs	neabs
0.33	0.0	92.59	1.32	5.77	0.0

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

Date of last modification: 10.02.2021

Approved: prof. Dr. Yaroslav Bazel', DrSc.

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ SSOL/04	Course name: Individual	Study of Scientific Literature
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period: esent	
Number of ECTS cr		
Recommended seme	ster/trimester of the cour	se:
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	nture:	
Course language:		
Notes:		
Course assessment Total number of asse	ssed students: 187	
	abs	n
	100.0	0.0
Provides:		
Date of last modifica	ation: 03.05.2015	
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.	

University: P. J. Šafá	rik University in Košice				
Faculty: Faculty of S	Faculty: Faculty of Science				
Course ID: ÚCHV/ MK/04	Course name: Internat	ional Conference			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent				
Number of ECTS cr					
	ster/trimester of the co	ourse:			
Course level: III.					
Prerequisities:					
Conditions for cours	se completion:				
Learning outcomes:					
Brief outline of the c	ourse:				
Recommended litera	iture:				
Course language:					
Notes:					
Course assessment Total number of asse	ssed students: 209				
	abs		n		
	100.0		0.0		
Provides:		·			
Date of last modifica	ntion: 03.05.2015				
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.				

University: P. J. Šafá	rik University in Košice				
Faculty: Faculty of S	Faculty: Faculty of Science				
Course ID: ÚCHV/ ZKC/04	Course name: Internation	nal Currented Journal			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent				
Number of ECTS cr					
	ster/trimester of the cour	se:	_		
Course level: III.					
Prerequisities:					
Conditions for cours	se completion:				
Learning outcomes:					
Brief outline of the c	ourse:				
Recommended litera	iture:				
Course language:					
Notes:					
Course assessment Total number of asse	ssed students: 284				
	abs	n			
	99.65	0.35			
Provides:					
Date of last modifica	ntion: 03.05.2015				
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.				

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ ZNC/04	Course name: Internation	al Non-Currented Jounal	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
	ster/trimester of the cour		
	ster/trimester of the cours	Se:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 21		
	abs	n	
	100.0	0.0	
Provides:			
Date of last modifica	ation: 03.05.2015		
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.		

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ NEM/04	Course name: Introduction	on 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: esent	
Number of ECTS cr		
	ster/trimester of the cour	se:
Course level: III.		
Prerequisities:		
Conditions for cours	e completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	iture:	
Course language:		
Notes:		
Course assessment Total number of asse	ssed students: 8	
	abs	n
	100.0	0.0
Provides:		
Date of last modifica	tion:	
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DK/04	Course name: Local Co	onference	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period: esent		
Number of ECTS cr	edits: 2		
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	ture:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 110		
	abs		n
	100.0		0.0
Provides:		•	
Date of last modifica	tion:		
Approved: prof. Dr.	Yaroslav Bazel', DrSc.		

University: P. J. Šafá	University: P. J. Šafárik University in Košice				
Faculty: Faculty of S	Faculty: Faculty of Science				
Course ID: ÚCHV/ DKZU/04	Course name: Local Confe	erence with Foreign Participation			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent				
Number of ECTS cr					
	ster/trimester of the course	e :			
Course level: III.					
Prerequisities:					
Conditions for cours	se completion:				
Learning outcomes:					
Brief outline of the c	ourse:				
Recommended litera	nture:				
Course language:					
Notes:					
Course assessment Total number of asse	ssed students: 207				
	abs	n			
100.0 0.0					
Provides:					
Date of last modifica	ntion: 03.05.2015				
Approved: prof. Dr.	Yaroslav Bazel', DrSc.				

University: P. J. Šafárik University in Košice					
Faculty: Faculty of S	Faculty: Faculty of Science				
Course ID: ÚCHV/ DKC/04	Course name: Local Curr	ented Journal			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent				
Number of ECTS cr	edits: 15				
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	nture:				
Course language:					
Notes:					
Course assessment Total number of asses	ssed students: 10				
	abs	n			
	100.0 0.0				
Provides:					
Date of last modifica	tion: 03.05.2015				
Approved: prof Dr	Yaroslav Bazel' DrSc				

University: P. J. Šafá:	rik University in Košice		
Faculty: Faculty of S	cience		
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 ECTS cr	edits: 5		
Recommended seme	ster/trimester of the cour	se:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	ture:		
Course language:			
Notes:			
Course assessment Total number of asses	ssed students: 18		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	tion: 03.05.2015		
Approved: prof. Dr. `	Yaroslav Bazeľ, DrSc.		

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 ECTS cr	edits: 2	
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:		
Notes:		
Course assessment Total number of asse	ssed students: 38	
	abs	n
	100.0	0.0
Provides:		
Date of last modifica	tion:	
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.	

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Metodológia chemickej analýzy environmentálnych MET3/05 systémov a biologických systémov 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: 8** Recommended semester/trimester of the course: 4. Course level: III. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 9 N P 0.0 100.0 Provides: prof. Dr. Yaroslav Bazel', DrSc., doc. RNDr. Katarína Reiffová, PhD., prof. Mgr. Vasil' Andruch, DSc. Date of last modification: 03.05.2015 Approved: prof. Dr. Yaroslav Bazel', DrSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Miniaturization of Analytical Systems MAS3/05 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: 8 Recommended semester/trimester of the course:** 1. Course level: III. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course:** Introduction, Classification of sensors, Chemical sensors, Electrochemical sensors, Potentiometric electrochemical sensors. Electrode with liquid membrane. Biosensors. Optical sensors. Application of biosensors in biotechnology. Biosensors for medicine and environment monitoring. Miniaturization of sensors, equipment and devices. Flow injection analysis. **Recommended literature:** 1. Janata J. Principles of Chemical Sensors, Plenum Press, London, 1989. 2. Narayanaswamy R., Wolfbeis O.S. Optical Sensors, Springer, 2004, 421 p. Course language: **Notes:** Course assessment Total number of assessed students: 18 P 0.0 100.0 Provides: prof. Dr. Yaroslav Bazel', DrSc., prof. Mgr. Vasil' Andruch, DSc.

Date of last modification: 03.05.2015

Approved: prof. Dr. Yaroslav Bazel', DrSc.

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ NZ/04	Durse ID: ÚCHV/ Course name: Not-Reviewed International or Local Proceedings Z/04	
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period: esent	
Number of ECTS cr		
Recommended seme	ster/trimester of the course	e:
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	nture:	
Course language:		
Notes:		
Course assessment Total number of asse	ssed students: 171	
	abs	n
	100.0	0.0
Provides:		
Date of last modifica	tion: 03.05.2015	
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ PVS/04	Course name: Patents, 1	nventions, Software	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of ECTS cr	edits: 2		
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	iture:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 0		
	abs		n
	0.0		0.0
Provides:		•	
Date of last modifica	tion:		
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.		

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Pedagogy for university teachers PgVU/17 Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 28s Course method: present **Number of ECTS 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: **Notes:** Course assessment Total number of assessed students: 32 abs neabs n 100.0 0.0 0.0 Provides: PaedDr. Renáta Orosová, PhD. Date of last modification: 12.02.2021 Approved: prof. Dr. Yaroslav Bazel', DrSc.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ VYS/04			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of ECTS cr	edits: 2		
Recommended seme	ster/trimester of the cour	rse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 179		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	tion:		
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.		

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: Course name: Psychology for University Lecturers

KPPaPZ/PsVU/17

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: Per study period: 28s

Course method: present

Number of ECTS credits: 5

Recommended semester/trimester of the course:

Course level: III.

Prerequisities:

Conditions for course completion:

Case study, micro-output, its analysis

Current modifications of the course for the semester 2020/2021 are listed in the electronic bulletin board of the course.

Learning outcomes:

Acquisition of psychological skills necessary for professional, competent performance of university teaching practice of doctoral students on the basis of acquisition and use of selected psychological knowledge from cognitive psychology, psychology of emotions and motivation, personality psychology, developmental, social, pedagogical psychology and health psychology. They will enable university teachers - doctoral students to understand the psychological interpretation of human development, upbringing and education. The acquired knowledge will enable better application in practice, are closely linked to practice and are based on current knowledge of the field.

Brief outline of the course:

University teacher and his work in the teaching process with a focus on:

teacher in relation to himself (cognitive, personality, social competencies and competencies in the use of methods), in relation to students and as part of the teacher-student relationship based on selected areas of cognitive psychology, psychology of emotions and motivation, developmental psychology, social psychology , educational psychology and health psychology with application to the university environment.

Recommended literature:

Alexitch, L. R. (2005). Applying social psychology to education. Social Psychology.–Ed.:

Schneider F., Gruman J., Coutts L.-Sage Publications, Inc, 205-228.

Fry, H., Ketteridge, S., & Marshall, S. (2008). A handbook for teaching and learning in higher education: Enhancing academic practice. Routledge.

Mareš, J.: Pedagogická psychologie. Portál, 2013.

Kniha psychologie. Universum, 2014

Čáp, J., Mareš, J.: Psychologie pro učitele. Praha: Portál 2007.

Vágnerová, M.: Školní poradenská psychológie pro pedagogy. Praha: Karolínum 2005.

Course language:

Page: 36

Notes: Course assessment Total number of assessed students: 27 abs n neabs 100.0 0.0 0.0

Provides: Mgr. Marta Dobrowolska Kulanová, PhD., doc. PhDr. Beata Gajdošová, PhD., PhDr. Anna Janovská, PhD.

Date of last modification: 17.02.2021

Approved: prof. Dr. Yaroslav Bazel', DrSc.

University: P. J. Šafá	rik University in Košice		
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 ECTS cr	edits: 2		
Recommended seme	ster/trimester of the cour	rse:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 62		
	abs	r	1
	100.0 0.0		
Provides:			
Date of last modifica	tion:		
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.		

University: P. J. Šafá:	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ RZ/04			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of ECTS cr	edits: 5		
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:			
Notes:			
Course assessment Total number of asses	ssed students: 305		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	tion: 03.05.2015		
Approved: prof. Dr. `	Yaroslav Bazeľ, DrSc.		

University: P. J. Šafá	rik University in Košic	ee	
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ SCI/04	Course ID: ÚCHV/ Course name: SCI Citation SCI/04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of ECTS cr			
	ster/trimester of the c	course:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	nture:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 183		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	tion:		
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: Dek. PF UPJŠ/JSD/14	Course ID: Dek. PF Course name: Spring School for PhD Students UPJŠ/JSD/14		
Course type, scope a Course type: Lectur Recommended cour Per week: Per stud Course method: pre	re rse-load (hours): ly period: 4d esent		
Number of ECTS cr			_
	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:			_
Notes:			_
Course assessment Total number of asses	ssed students: 154		
	abs n		
	100.0	0.0	
Provides: prof. RND	r. Katarína Cechlárová, DrS	C.	_
Date of last modifica	ation: 03.05.2015		_
Approved: prof. Dr.	Yaroslav Bazel', DrSc.		-

University: P. J. Šafá	rik University in Košic	e		
Faculty: Faculty of S	cience			
Course ID: ÚCHV/ ZSP/04	ourse ID: ÚCHV/ Course name: Study Stay Abroad SP/04			
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period: esent			
Number of ECTS cr	edits: 2			
Recommended seme	ster/trimester of the c	ourse: 6., 8.		
Course level: III.				
Prerequisities:				
Conditions for cours	e completion:			
Learning outcomes:				
Brief outline of the c	ourse:			
Recommended litera	ture:			
Course language:				
Notes:				
Course assessment Total number of asses	ssed students: 79			
	abs		n	
	100.0 0.0			
Provides:		•		
Date of last modifica	tion:			
Approved: prof. Dr.	Yaroslav Bazel', DrSc.			

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ VBP/04	<u> </u>		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of ECTS cr	edits: 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:			
Notes:			
Course assessment Total number of asse	ssed students: 292		
	abs	n	
	100.0	0.0	
Provides:			
Date of last modifica	tion:		
Approved: prof. Dr.	Yaroslav Bazel', DrSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ VPSV/04	Course ID: ÚCHV/ Course name: Supervision of a Students Scientific Work PSV/04		
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:		
Number of ECTS cr	edits: 6		
Recommended seme	ster/trimester of the cou	rse: 6., 8.	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 67		
	abs	n	
	100.0 0.0		
Provides:		· · · · · · · · · · · · · · · · · · ·	
Date of last modifica	tion:		
Approved: prof. Dr.	Yaroslav Bazel', DrSc.		

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Theoretical basics of analytical chemistry

TZAC3/05

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: 8

Recommended semester/trimester of the course: 1.

Course level: III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Brief outline of the course:

Analytical chemistry. Relationship between analytical chemistry and other scientific branches. History of analytical chemistry. Problems and trends in recent analytical chemistry. Objects of analysis. Instrumental equipment of a modern analytical laboratory. Research analytical chemistry and analytical practice. Validation of analytical methods. Factors important to bear in mind when choosing a proper method. Reasons of improper analytical results. Modern, highly selective methods of analysis. Speed and factors affecting the speed of analysis. Test and screening methods. Field analysis. Primary X-ray spectrometry, microprobe. Non-destructive methods of analysis, principle, utility. Distance analysis. Automation of analysis, examples. Flow analysis - FIA and SIA. Miniaturization of analytical measurements. Economic aspects of analysis. Analytical reaction, chemical equilibrium in solutions. Gravimetric. Volumetric. Instrumental methods of qualitative and quantitave determination of analytes. Absorption and emission spectroscopy, UV-VIS spectrometry, fluorescence and phosphorence spectrophotometry, emission and atomic absorption spectroscopy, infrared spectrometry, Raman spectroscopy, Roentgen spectroscopic methods, radiochemical methods, NMR spectroscopy, mass spectrometry. Electroanalytical methods (voltamperometry, potenciometry, electroseparation, coulometry and conductometry). Thermical analysis. Kinetic methods of analysis. Separation methods. Microextraction techniques (DLLME, SDME, SPME). Gas chromatography. Liquid chromatography, TLC, HPLC.

Recommended literature:

- 1. D. Harvey, Modern Analytical Chemistry, 2000, McGraw-Hill Companies, Inc.
- 2. H.H. Willard, L.L. Merritt, J.A. Dean, F.A. Settle, Instrumental Methods of Analysis, 1988, Wadsworth Publ. Co.
- 3. A. Rios, A. Escarpa, B. Simonet, Miniaturization of Analytical Systems, 2009, John Wiley &Sons, Ltd.
- 4. Jaromír Ružicka, Elo Harald Hansen, Flow Injection Analysis, 1988, John Wiley & Sons.
- 5. John R. Dean, Extraction Techniques in Analytical Sciences, 2009, John Wiley & Sons.

Course language:

Notes:				
Course assessment Total number of assessed students: 24				
N	P			
0.0	100.0			

Provides: prof. RNDr. Andrej Oriňak, PhD., prof. Dr. Yaroslav Bazeľ, DrSc., doc. RNDr. Taťána Gondová, CSc., doc. RNDr. Katarína Reiffová, PhD., doc. Ing. Viera Vojteková, PhD., prof. Mgr. Vasiľ Andruch, DSc.

Date of last modification: 03.05.2015

Approved: prof. Dr. Yaroslav Bazel', DrSc.

University: P. J. Šafá	rik University in Koš	ice			
Faculty: Faculty of S	cience				
Course ID: ÚCHV/ PDS/18	Course name: Writing Dissertation Work				
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): ly period:				
Number of ECTS credits: 0					
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:					
Notes:					
Course assessment Total number of asse	ssed students: 6				
	N		P		
	0.0		100.0		
Provides:		1			
Date of last modification:					
Approved: prof. Dr.	Yaroslav Bazeľ, DrSc	<i>.</i> .			