University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/ Course name: Academic English PFAJAKA/07

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, present

Number of credits: 2

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

Course level: I., II., N

## **Prerequisities:**

## **Conditions for course completion:**

kontrolný písomný test, aktivita na hodine

záverečný písomný test povolené max. 2 absencie

stupnica hodnotenia: A 93-100, B 86-92, C 79-85, D 72-78, E 65-71, FX 64 a menej

aktivita na hodine

predmet končí hodnotením, t.j. povolený je 1 opravný test

### **Learning outcomes:**

Osvojenie si a rozvíjanie užitočných techník akademického písomného ako aj ústneho prejavu so zameraním na rozvoj jazykových kompetencií študenta, na upevňovanie a rozvíjanie všetkých jazykových zručností na stredne pokročilej až pokročilej úrovni ovládania jazyka (B2/C1 podľa Spoločného európskeho referenčného rámca pre jazyky). Predmet kladie dôraz na používanie akademickej angličtiny v akademickom prostredí.

#### **Brief outline of the course:**

Akademická angličtina a jej charakteristiky

Čítanie odborných článkov, analýza, parafrázovanie

Spájacie slová v akademickom písaní

Formálna a neformálna angličtina a ich črty

Vyjadrovanie príčiny, následku v akademickom jazyku

Čítanie odbornej publikácie, analýza, parafrázovanie

Slovotvorba v anglickom jazyku- predpony a prípony

Ako prezentovať v angličtine

Parafrázovanie a definovanie

Ako písať abstrakt

Slovosled v akademickom diškurze

#### **Recommended literature:**

Seal B.: Academic Encounters, CUP, 2002

T. Armer: Cambridge English for Scientists, CUP 2011

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

Zemach, D.E, Rumisek, L.A: Academic Writing, Macmillan 2005

Olsen, A.: Active Vocabulary, Pearson, 2013

www.bbclearningenglish.com

Cambridge Academic Content Dictionary, CUP, 2009

# **Course language:**

**Notes:** 

### **Course assessment**

Total number of assessed students: 292

A	В	С	D	Е	FX
29.11	22.26	16.1	11.3	8.22	13.01

Provides: PaedDr. Gabriela Bednáriková

Date of last modification: 06.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Alternative Pedagogy ALP/06 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:** 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 54  $\mathbf{C}$ Α В D Е FX 85.19 12.96 0.0 0.0 0.0 1.85

Provides: Mgr. Ján Juščák, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KFaDF/

**Course name:** Antique Philosophy and Present Times

AFS/05

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: 2.

Course level: I., II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 30

A	В	С	D	Е	FX
83.33	6.67	6.67	0.0	3.33	0.0

Provides: doc. PhDr. Pavol Tholt, PhD., mim.prof., Doc. PhDr. Peter Nezník, CSc.

Date of last modification: 26.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

**Course name:** Basic experimental apparatus methods

ZEM1/04

Course type, scope and the method:

Course type: Practice

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

Course method: present

Number of credits: 4

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

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 2

A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

**Provides:** prof. RNDr. Katarína Györyová, DrSc., prof. RNDr. Juraj Černák, CSc., doc. RNDr. Mária Reháková, CSc., doc. RNDr. Vladimír Zeleňák, PhD., doc. RNDr. Ivan Potočňák, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

**Course name:** Basic Toxicology

ZTOX/04

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

**Number of credits: 5** 

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

Course level: II.

**Prerequisities:** 

### **Conditions for course completion:**

### **Learning outcomes:**

Goal of the course is to provide the students with a knowledge of types of toxic substances and their metabolism, safe and handling of toxic substances.

#### **Brief outline of the course:**

Historical aspects, types of toxic substances, types of exposure, dose-response relationship. Disposition of toxic compounds (absorption, distribution, excretion of toxic compounds). Metabolism of toxic compounds. Drugs as toxic substances, food additives and contaminants, environmental pollutans. Statement of chemistry laboratory policy. Safe and handling of toxic substances.

## **Recommended literature:**

G. F. Fuhrman: Allgemeine Toxikologie fuer Chemiker, Teubner Verlag, Stutgart 1984.

V. E. Forbes, T. L. Forbe: Ecotoxicology in Theory and Practice, Chapman&Hall, London 1994.

J. A. Timbrell: Introduction to Toxicology, Taylor&Francis, London 1994.

#### Course language:

#### Notes:

## Course assessment

Total number of assessed students: 250

Α	В	С	D	Е	FX
21.2	26.8	24.0	18.0	8.8	1.2

Provides: prof. RNDr. Katarína Györyová, DrSc.

Date of last modification: 03.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/

Course name: Biology and Didactics of Biology

BDB/14

Course type, scope and the method:

**Course type:** 

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

Per week: Per study period: Course method: present

Number of credits: 1

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

Course level: II.

**Prerequisities:** ÚBEV/DIB1/03 and (ÚBEV/FG1/03 or ÚBEV/ZOG1/03) and (ÚBEV/ZOM/04 or ÚBEV/ZO1/04 or ÚBEV/ZOO1/11 or ÚBEV/BO1/03 or ÚBEV/BOT1/03)

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

**Course assessment** 

Total number of assessed students: 43

A	В	С	D	Е	FX
25.58	20.93	27.91	20.93	4.65	0.0

**Provides:** 

Date of last modification: 18.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

**Course name:** Biotechnology

BTC/03

Course type, scope and the method:

Course type: Lecture

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

Course method: present

**Number of credits: 5** 

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

Course level: II.

**Prerequisities:** 

## **Conditions for course completion:**

test

## **Learning outcomes:**

Students obtained the knowledge of basic biotechnological processes and their applications in agriculture, industry, food production and medicine.

#### **Brief outline of the course:**

Classification of biotechnology, disciplines and subjects which are involved with biotechnology. The fermentation processes, types of bioreactors, impellers, principles of microbial growth, media and substrates for fermentation processes. The bioremediation, production and application of biogas, in-vessel composting. Micro-organisms used to preparation amino acids, their fermentation preparation, isolation and possible uses. The methods of classical Plant Biotechnology. Ethanol fermentation, spirits, production of wine and beer. The biological filters, nutrient removal and the membrane bioreactors. Antibiotics.

#### **Recommended literature:**

E.M.T. El-Mansi et al., Fermentation microbiology ang biotechnology, second edition, 2007

Y.H. Hui, Food biochemistry & food processing, Blackwell Publishing 2006

J.E. Smith, Biotechnology, Cambridge university press 2009

### Course language:

### **Notes:**

### **Course assessment**

Total number of assessed students: 84

A	В	С	D	Е	FX
42.86	23.81	19.05	8.33	5.95	0.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 03.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ | Course name: Botany I

BO1/03

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: 5** 

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

Course level: I., II.

**Prerequisities:** 

## **Conditions for course completion:**

## **Learning outcomes:**

Introduction to biology of lower plants.

#### **Brief outline of the course:**

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

Literature:

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

### **Recommended literature:**

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

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

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

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

## Course language:

## **Notes:**

### **Course assessment**

Total number of assessed students: 1407

A	В	C	D	Е	FX
12.72	17.91	25.3	21.32	19.69	3.06

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

Date of last modification: 13.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafá	rik University in Košice					
Faculty: Faculty of S	Faculty: Faculty of Science					
Course ID: ÚBEV/ BOT1/03	Course name: Botany II					
Course method: pre	re / Practice rse-load (hours): study period: 28 / 28 esent					
Number of credits: 5						
	ster/trimester of the course: 2.					
Course level: I., II.						
Prerequisities: ÚBEV	V/TCB1/03					
Conditions for cours Practical and theoreti	-					
<b>Learning outcomes:</b> To obtain of survey in	n knowledge and methods in systematics of tracheophytes.					
cladistics and molecular plants. Gymnosperma Evolution and general and Caryophyllid clar Practices are devoted of ferns and allies fronifers. Selected fam Cyperaceae, Poaceae Fabaceae, Rosaceae	time of plant systematics. Approaches to plant classification. Principles of ular taxonomy. Tracheophytes, clades of lycophytes, ferns and allies. Seed and their evolution: cycads, ginkgos, conifers, gnetophytes. Angiosperms. I description. Basal clades and Magnoliid clade. Monocots. "Basal tricolpates" de. Rosid and asterid clades of tricolpates. It to study of the most important families of tracheophytes. Fossil evidence from Palaeozoic age. Tropical a subtropical flora. Ferns. Practical study of milies of angiosperms. ( <i>Magnoliaceae, Araceae, Liliaceae, Amaryllidaceae, Ranunculaceae, Papaveraceae, Caryophyllaceae, Euphorbiaceae, Violaceae, Betulaceae, Brassicaceae, Boraginaceae, Plantaginaceae, Lamiaceae, e</i>					
Mártonfi P.: Systema Judd W. S., Campbel A phylogenetic Appr	tika cievnatých rastlín, 2. vydanie ES UPJŠ, Košice, 2006. tika cievnatých rastlín ES UPJŠ, Košice, 2003. l Ch. S., Kellogg E. A. & Stevens P. F., Donoghue M. J.: Plant Systematics. oach, 2nd ed Sinauer Associates, Sunderland, 2002. M.: Veľký kľúč na určovanie rastlín I. a II SPN, Bratislava, 1991 a 1992.					

Course language:

**Notes:** 

Course assessm	Course assessment				
Total number of assessed students: 1176					
A	В	С	D	Е	FX
10.46	11.65	17.26	20.24	24.06	16.33

**Provides:** prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčik, PhD.

Date of last modification: 13.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Class Management MT/09 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:** 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 351 C Α В D Е FX 58.4 30.48 8.55 1.14 0.28 1.14

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

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Communication and Cooperation KPPaPZ/KK/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: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 281 abs n  $\mathbf{Z}$ 98.22 1.78 0.0 Provides: Mgr. Ondrej Kalina, PhD. Date of last modification: 04.02.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

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University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KGER/ Course name: Communication Competence in the German Language

NJKK/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:

Course level: I., II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 42

A	В	С	D	Е	FX
57.14	14.29	7.14	4.76	14.29	2.38

**Provides:** Mgr. Eva Černáková, PhD.

Date of last modification: 05.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: CJP/ Course n

PFAJKKA/07

**Course name:** Communicative Competence in English

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, present

Number of credits: 2

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

Course level: I., II., N

## **Prerequisities:**

#### **Conditions for course completion:**

ontrolný písomný test, aktivita na hodine

záverečný písomný test

stupnica hodnotenia A 93-100, B 86 - 92, C 79-85, D 72-78, E 65-71, FX menej ako 64

Povolené max. 2 absencie počas semestra

predmet končí hodnotením, možnosť jedného opravného testu

#### **Learning outcomes:**

Uplatnenie a aktívne používanie svojich teoretických vedomostí v praktických komunikačných situáciách. Zdokonalenie jazykových vedomostí a zručností študenta, rečovej, pragmatickej a vecnej kompetencie, predovšetkým zlepšujú komunikáciu, schopnosť prijímať a formulovať výpovede, efektívne vyjadrovať svoje myšlienky ako aj orientovať sa v obsahovom pláne výpovede. Precvičovanie rečových intencií kontaktných (napr. pozdravy, oslovenia, pozvanie, oslovenie), informatívnych (napr. získavanie a podávanie informácií, vyjadrenie priestorových a časových vzťahov), regulačných (napr. prosba, poďakovanie, zákaz, pochvala, súhlas, nesúhlas) a hodnotiacich (napr. vyjadrenie vlastného názoru, stanoviska, želania, emócií). Výsledkom budovania praktickej jazykovej kompetencie majú byť vedomosti a zručnosti zodpovedajúce požiadavkám a kritériám dokumentu Spoločný európsky referenčný rámec pre vyučovanie jazykov - úroveň B2.

### **Brief outline of the course:**

Rodina, jej formy a problémy

Vyjadrovanie pocitov a dojmov

Dom, bývanie a budúcnosť

Formy a dialekty v anglickom jazyku

Život v meste a na vidieku

Kolokácie a idiomy, zaužívané slovné spojenia

Prázdniny a sviatky vo svete

Životné prostredie a ekológia

Výnimky zo slovosledu

Frázové slovesá a ich použitie

Charakteristiky neformálneho diškurzu

### **Recommended literature:**

McCarthy M., O'Dell F.: English Vocabulary in Use, 1994

Misztal M.: Thematic Vocabulary, 1998

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

Principal, 2008

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

www.bbclearningenglish.com

Jones L.: Communicative Grammar Practice, CUP, 1985 Alexander L.G.: Longman English Grammar, Longman, 1988

## Course language:

#### **Notes:**

#### Course assessment

Total number of assessed students: 174

A	В	С	D	Е	FX
36.78	22.41	18.39	9.77	8.05	4.6

Provides: PaedDr. Gabriela Bednáriková, Mgr. Silvia Marcinová, PhD.

Date of last modification: 06.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

**Course ID:** CJP/ Course name: Communicative Grammar in English

PFAJGA/07

Course type, scope and the method:

**Course type:** Practice

Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: combined, present

Number of credits: 2

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

Course level: I., II., N

## **Prerequisities:**

## **Conditions for course completion:**

kontrolná písomná práca, záverečná písomná práca

stupnica hodnotenia: A 93-100, B 86-92, C 79-85, D 65-71, 64 a menej - FX

aktivita na hodinách, povolené 2 absencie

predmet je ukončený hodnotením, možnosť jedného opravného testu

### **Learning outcomes:**

Identifikovanie a odstránenie najfrekventovanejších gramatických chýb v ústnom prejave, ako aj v písomnom styku. Rozvoj jazykových kompetencií študenta so zameraním na funkcie gramatiky anglického jazyka v každodennej interakcii, v komunikačnom akte na stredne pokročilej úrovni ovládania jazyka (B2 podľa Spoločného európskeho referenčného rámca pre jazyky).

#### **Brief outline of the course:**

Zvieratá a rastliny na zemi

Zločin a trest

Cestovanie po mori a vzduchom

Jedlá a reštaurácie, národná kuchyňa

Vzdelanie na vysokých školách

História a viera

Vybrané problémy anglickej výslovnosti, gramatiky ( nepriama reč, slovotvorba, predložkové väzby, anglická syntax, kondicionály v angličtine a slovnej zásoby príslušného zamerania Vybrané funkcie praktického odborného jazyka potrebné na prácu s odborným textom

#### **Recommended literature:**

Misztal M.: Thematic Vocabulary, 1994

McCarthy, O'Dell: English Vocabulary in Use, 1994

Alexander L.G.: Longman English Grammar, Longman, 1988 Jones I. - Communicative Grammar Practice, CUP, 1992

Vince M.: Macmillan Grammar in Context, Macmillan, 2008

www.bbclearningenglish.com

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

#### Course language: **Notes: Course assessment** Total number of assessed students: 378 A В $\mathbf{C}$ D E FX 39.42 18.25 17.2 8.73 5.82 10.58

Provides: PaedDr. Gabriela Bednáriková

Date of last modification: 06.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Continual pedagogic practice I

MPPb/03

Course type, scope and the method:

**Course type:** Practice

Recommended course-load (hours): Per week: Per study period: 3t

Course method: present

Number of credits: 1

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

Course level: II.

Prerequisities: ÚCHV/SPC1a/03

## **Conditions for course completion:**

### **Learning outcomes:**

The aim of this subject is to apply theoretical preparation from chemistry didactics by the creation of lesson plans for teaching

#### **Brief outline of the course:**

The practice runs 3 week and is realizes only in one school in Košice from both certificated subjects. Content of practise is obligate visitation at 8 lessons and unlearns minimal 10 lessons from each certificated subject. A part of practice is methodical and professional analysis unlearn lesson and active implication in out of class and school activities.

#### **Recommended literature:**

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 158

abs	n
100.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová

Date of last modification: 03.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Continual pedagogic practice II

MPPc/04

Course type, scope and the method:

**Course type:** Practice

Recommended course-load (hours): Per week: Per study period: 4t

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚCHV/MPPb/03 and ÚCHV/DCHa/03

## **Conditions for course completion:**

### **Learning outcomes:**

The aim of this subject is to apply theoretical preparation from chemistry didactics by the creation of lesson plans for teaching

#### **Brief outline of the course:**

The practice runs 4 week and is realizes only in one school in Košice from both certificated subjects. Content of practise is obligate visitation at 8 lessons and unlearns minimal 18 lessons from each certificated subject. A part of practice is methodical and professional analysis unlearn lesson and active implication in out of class and school activities.

#### **Recommended literature:**

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 138

abs	n
100.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová, RNDr. Ivana Sotáková

Date of last modification: 03.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

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

Faculty: Faculty of Science

Course ID: ÚCHV/

**Course name:** Continual pedagogic practise III

MPPd/05

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: Per study period: 3t

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 4.

Course level: IL

Prerequisities: (ÚCHV/MPPc/04 or ÚCHV/MPPc/15) and ÚCHV/DCH2/15

## **Conditions for course completion:**

### **Learning outcomes:**

The aim of this subject is to apply theoretical preparation from chemistry didactics by the creation of lesson plans for teaching

#### **Brief outline of the course:**

The practice runs 3 week and is realizes only in one school in Košice from both certificated subjects. Content of practise is obligate visitation at 4 lessons and unlearns minimal 15 lessons from each certificated subject. A part of practice is methodical and professional analysis unlearn lesson and active implication in out of class and school activities.

#### **Recommended literature:**

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 150

abs	n
100.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová, RNDr. Ivana Sotáková

Date of last modification: 03.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Course name: Continue

MPPb/03

**Course name:** Continuous teaching practice I.

Course type, scope and the method:

**Course type:** Practice

Recommended course-load (hours): Per week: Per study period: 3t

Course method: present

Number of credits: 1

Recommended semester/trimester of the course: 2.

Course level: II.

**Prerequisities:** 

#### **Conditions for course completion:**

Verbal: trainer-teacher assessment of student outcomes in analysis of the lesson.

Written evaluation of the work of the student mentor (trainer-teacher).

#### **Learning outcomes:**

#### **Brief outline of the course:**

The practice lasts three weeks, at primary or at secondary school. During practice, students visit biology lessons and assist teacher during school hours.

They teach at least five biology lessons standalone. Required is also an analysis of lessons with a trainer-teacher. Students are required to participate in school life and participate in the activities organized by the school.

## **Recommended literature:**

Current curriculum and biology textbooks in Slovakia.

## Course language:

**Notes:** 

#### Course assessment

Total number of assessed students: 264

abs	n
99.24	0.76

## **Provides:**

Date of last modification: 13.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Continuous teaching practice II. MPPc/03 Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: Per study period: 4t Course method: present Number of credits: 2 Recommended semester/trimester of the course: 3. Course level: IL Prerequisities: ÚBEV/MPPb/03 **Conditions for course completion:** Verbal assessment of outcomes by trainer-teacher during the analysis of the lesson. A written evaluation of the student trainer-teacher. **Learning outcomes:** The aim is to get a practice teaching skills, to acquaint themselves with the organization of school. **Brief outline of the course:** - Observation of lesson in the classroom (6VH/AP). - Independent lessons leaded by pre-service teacher (18 VH / AP). - Didactic analysis of lessons. - Active participation in extracurricular activities at school.

## **Recommended literature:**

Biology textbooks for primary and secondary schools.

#### Course language:

### **Notes:**

#### Course assessment

Total number of assessed students: 242

abs	n
100.0	0.0

## **Provides:**

Date of last modification: 13.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/

**Course name:** Continuous teaching practice III.

MPPd/05

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: Per study period: 3t

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 4.

Course level: II.

Prerequisities: ÚBEV/MPPc/03 or ÚBEV/MPPc/15

#### **Conditions for course completion:**

Verbal assessment of outcomes by trainer-teacher during the analysis of the lesson.

A written evaluation of student work (formulated by a trainer-teacher).

## **Learning outcomes:**

#### **Brief outline of the course:**

The practice lasts three weeks (at primary or at secondary school). During practice students observ for at least six and teach a minimum of ten biology lessons. Analysis of teaching hours are required. Students are required to participate in school life and participate in the activities organized by the school. Practice III can be recognized at the request of a student, when they led activities in the facultative biology education.

## **Recommended literature:**

Biology textbooks for primary and secondary schools.

## Course language:

**Notes:** 

#### Course assessment

Total number of assessed students: 263

abs	n
100.0	0.0

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

Date of last modification: 13.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ **Course name:** Cosmetic chemistry KC/03 Course type, scope and the method: Course type: Lecture / Practice **Recommended course-load (hours):** Per week: 2 / 1 Per study period: 28 / 14 Course method: present Number of credits: 4 Recommended semester/trimester of the course: 3. Course level: II. **Prerequisities: Conditions for course completion:** Seminar report on the selected subjects of cosmetic chemistry and its oral presentation connected with discussion. Terminal examination by oral form. **Learning outcomes:** The basic chemical ingredients in cosmetic products, their isolation from natural sources. The construction of some interesting groups of the organic structures and their application in cosmetic industry. **Brief outline of the course:** Skin and its components. The chemistry of lipids. Lipids, their classification (triacylglycerols, glycerophospholipids and sfingophoslipids), liposomes as transport systems. Fatty acids and alcohols, natural and synthetic waxes. Surfactants, their classification. Antioxidants. Dyes, their classification, organic and inorganic dyes, natural and synthetic. Biological active compounds (amino acids, peptides, proteins hydroxy acids, vitamins, polysaccharides) as the cosmetic ingredients. The chemistry of fragrances. Compounds derived from shikimic acid and mevalonic acid, their biosynthesis, Synthetic fragrances and their construction. **Recommended literature:** 1. S. V. Bhat, B. A. Nagasampagi, M. Sivakumar: Chemistry of Natural Products, Springer Narosa 2005, ISBN 81-7319-481-5. 2. G. Ohloff: Scent and Fragrances, Springer-Verlag Berlín Heidelberg 1994, ISBN 3-540-57108-6. 3. D. H. Pybus, CH. S. Sell: The chemistry of fragrances, Royal Society of Chemistry 1999, ISBN 0-8540-528-7. 4. J. McMurry: Organic chemistry, Brooks/Cole, a Thomson Learning Company 2004, Sixth Eddition, ISBN 0534389996.

Course language:

**Notes:** 

Course assessment					
Total number of	f assessed studen	ts: 86			
A	В	C	D	Е	FX
79.07	15.12	4.65	1.16	0.0	0.0

**Provides:** doc. RNDr. Miroslava Martinková, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course name: Cultural Anthropology Course ID: KAE/ KAp/03 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:** 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 126 C Α В D Е FX 84.92 14.29 0.79 0.0 0.0 0.0 Provides: Mgr. Adriana Jesenková, PhD.

Date of last modification: 29.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Development of Social and Emotional Intelligence KPPaPZ/RSEI/03 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:** 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 319 abs n 97.18 2.82 Provides: Mgr. Lucia Hricová Date of last modification: 04.02.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

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University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Course nam

DIB1/03

Course name: Didactics of biology

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 3 Per study period: 28 / 42

Course method: present

**Number of credits:** 6

Recommended semester/trimester of the course: 2.

Course level: II.

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

#### **Conditions for course completion:**

Continuous assessment of tasks, which students prepared and submitted.

Oral exam

### **Learning outcomes:**

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

## **Brief outline of the course:**

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

#### **Recommended literature:**

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

Kimáková, K., Dunayová, D., Luczyová P.: Inovačné metódy vyučovania prírodopisu a biológie, MC Prešov, 2001

Švecová, M.: Teorie a praxe zařazení školních projektů ve výuce přírodopisu a biologie,

Karolinum Praha 2001

Periodical publications for teaching biology. Internal study materials in Moodle https://

lms.upjs.sk/login/index.php

Existing curriculum standards and biology textbooks for elementary and secondary schools

## Course language:

**Notes:** 

## **Course assessment**

Total number of assessed students: 378

A	В	С	D	Е	FX
48.41	29.63	16.93	5.03	0.0	0.0

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

Date of last modification: 13.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DPP1/14	Course name: Diploma	a Project I	
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of credits: 1			
Recommended seme	ster/trimester of the co	urse: 1.	
Course level: II.			
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: 10		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	ition: 17.02.2014		
<b>Approved:</b> doc. RNE Volodymyr Starosta, l	• •	., doc. RNDr. Katarína Kimáková, CSc.	., prof.

<b>University:</b> P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚCHV/ DPP1/14	Course name: Diplom	na Project I	
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	ourse: 1.	
Course level: II.			
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: 12		
	abs n		
100.0 0.0			
Provides:			
Date of last modifica	tion: 17.02.2014		
<b>Approved:</b> doc. RNI Volodymyr Starosta, l	•	c., doc. RNDr. Katarína Kimáková	, CSc., prof.

University: P. J. Šafá	rik University in Košice	·	
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DPP2/14	Course name: Diplom	a Project II	
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period: esent		
Number of credits: 2			
Recommended seme	ster/trimester of the co	ourse: 2.	
Course level: II.			
Prerequisities: ÚBE	V/DPP1/14		
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: 10		
	abs	n	
	100.0 0.0		
Provides:			
Date of last modifica	tion: 17.02.2014		
<b>Approved:</b> doc. RNE Volodymyr Starosta, l	• ,	e., doc. RNDr. Katarína Kimáková, CSc., prof.	

<b>University:</b> P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚCHV/ DPP2/14	Course name: Diplom	a Project II
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 seme	ster/trimester of the co	urse: 2.
Course level: II.		
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: 12	
	abs	n
100.0 0.0		
Provides: doc. Ing. V	iera Vojteková, PhD.	
Date of last modifica	tion: 17.02.2014	
Approved: doc. RNI	• ,	., doc. RNDr. Katarína Kimáková, CSc., prof.

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University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: ÚCHV/ Course name: Diploma Project III DPP3/14						
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 cours	e: 3.				
Course level: II.						
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: 15					
	abs	n				
	100.0	0.0				
Provides: doc. RNDr. Ivan Potočňák, PhD., doc. Ing. Viera Vojteková, PhD.						
Date of last modification: 17.02.2014						
Approved: doc. RND	<b>5</b> , ,	oc. RNDr. Katarína Kimáková, CSc., prof.				

Page: 37

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Diploma Project III DPP3/14 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 semester/trimester of the course: 3. Course level: II. Prerequisities: ÚBEV/DPP2/14 or ÚBEV/DP2b/03 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 13 abs n 100.0 0.0 **Provides:** Date of last modification: 17.02.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

Page: 38

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Diploma Thesis and its Defence DPOU/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of credits: 15** Recommended semester/trimester of the course: Course level: II. Prerequisities: ÚBEV/DPP3/14 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 12 C Α В D Е FX 58.33 41.67 0.0 0.0 0.0 0.0 **Provides:** 

Date of last modification: 17.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ Course name: Diploma Thesis and its Defence

DPOU/14

Course type, scope and the method:

**Course type:** 

Recommended course-load (hours):

Per week: Per study period: Course method: present

**Number of credits: 15** 

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

Course level: II.

Prerequisities: ÚCHV/DPP3/14

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 16

A	В	С	D	Е	FX
62.5	31.25	6.25	0.0	0.0	0.0

**Provides:** 

Date of last modification: 17.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Diplomový seminár z chémie pre XCH DSU1a/10 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:** 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 5 abs n 100.0 0.0 Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová Date of last modification: 03.02.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Diplomový seminár z chémie pre XCH DSU1b/10 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: 3. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 1 abs n 100.0 0.0 Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová Date of last modification: 03.02.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Educational Action Research APV/09 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: 3. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 29 C Α В D Е FX 86.21 13.79 0.0 0.0 0.0 0.0

Provides: prof. Volodymyr Starosta, DrSc.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/

Course name: Education-related Legislation

SL1/05

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:** 2.

Course level: I., II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 337

A	В	С	D	Е	FX
39.17	31.16	16.91	4.15	1.78	6.82

Provides: PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Nováková, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ | Course name: Ethology

ETO1/03

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:** 6

Recommended semester/trimester of the course: 3.

Course level: II.

**Prerequisities:** 

### **Conditions for course completion:**

Recognition.

Written examination.

### **Learning outcomes:**

To teach the students to know and to be aware of the importance of the behavioural aspect in biological sciences

### **Brief outline of the course:**

History and development of ethology. Ethological methods. The innate forms of behaviour. The simplest forms of learning – conditioning and instrumental learning. Higher form of learning. Social behaviour. Sexual behaviour. Play behaviour. Biological rhythms. Orientation in space and animal migrations. Communication systems of animals. Emotions. Aggression in animal and human behaviour.

# **Recommended literature:**

Franck, D.: Verhaltensbiologie. Einfuhrung in die Ethologie. Georg Thieme-Verlag, 1993 Manning, A., Dawkins, M. S.: An introduction to animal behaviour. Cambridge University Press, 1992

### Course language:

#### Notes:

#### Course assessment

Total number of assessed students: 748

A	В	С	D	Е	FX
38.24	26.34	26.74	6.95	1.6	0.13

Provides: RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD., Mgr. Adriana Hižňanová

**Date of last modification:** 13.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Cour

**Course name:** Fieldwork from zoology

TCZ/03

Course type, scope and the method:

**Course type:** Practice

Recommended course-load (hours): Per week: Per study period: 5d

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: I., II.

**Prerequisities:** 

# **Conditions for course completion:**

# **Learning outcomes:**

Practical observation of morphology of vertebrates.

#### **Brief outline of the course:**

Systematic and phylogenetic relationships of vertebrate. Review of important groups of fishes, amphibians, reptiles, bidrs and mammals - observation, and laboratory work.

### **Recommended literature:**

# Course language:

**Notes:** 

### Course assessment

Total number of assessed students: 469

abs	n
98.93	1.07

**Provides:** RNDr. Peter Ľuptáčik, PhD., doc. RNDr. Ľubomír Panigaj, CSc., RNDr. Andrej Mock, PhD

Date of last modification: 13.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

**Course ID:** ÚBEV/ | **Course name:** Fieldworks from Botany

TCB1/03

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: Per study period: 5d

Course method: present

Number of credits: 2

Recommended semester/trimester of the course: 2.

Course level: I., II.

**Prerequisities:** 

# **Conditions for course completion:**

# **Learning outcomes:**

Study of methods for identification and determination of common central-europaean plants.

#### **Brief outline of the course:**

Plant identification in different habitats. Plant determination. Floristic records.

### **Recommended literature:**

Dostál J., Červenka M.: Veľký kľúč na určovanie rastlín I. a II. - Veda, Bratislava 1991 a 1992. Kubát K. (ed.): Klíč ke květeně České republiky. - Academia, Praha, 2002.

Marhold K. a Hindák F. (eds.): Zoznam nižších a vyšších rastlín Slovenska. Checklist of non-vascular and vascular plants of Slovakia. - Veda, Bratislava 1998.

Krejča J. (ilustr.): Veľká kniha rastlín. - Bratislava (various editions).

### Course language:

#### **Notes:**

#### Course assessment

Total number of assessed students: 729

abs	n
99.86	0.14

**Provides:** prof. RNDr. Pavol Mártonfi, PhD., prof. RNDr. Martin Bačkor, DrSc., Mgr. Vladislav Kolarčik. PhD.

Date of last modification: 13.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

**Course ID:** KPE/ **Course name:** Fundamentals of Educational and Psychological Research

ZMPPV/12 Methodology

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: 4

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

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 372

A	В	С	D	Е	FX
20.97	27.42	22.85	20.43	7.53	0.81

Provides: PhDr. Anna Janovská, PhD., Mgr. Zuzana Nováková, PhD., Mgr. Mária Bačíková, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

**Course ID:** KAE/ **Course name:** Fundamentals of Ethics 2

ZET2/07

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: II.

Prerequisities: KAE/ZE1/07

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 50

A	В	С	D	Е	FX
94.0	6.0	0.0	0.0	0.0	0.0

Provides: PhDr. Andrea Klimková, PhD.

Date of last modification: 29.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: General Pedagogy and Didactics VPD/03 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: 5 Recommended semester/trimester of the course:** 1. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language:

**Notes:** 

Course assessment

Total number of assessed students: 958

A	В	С	D	Е	FX
10.65	21.71	25.99	21.82	10.33	9.5

Provides: PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Nováková, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚGE/ Course name: Geology and petrography

**GEB/12** 

Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours):

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

Course method: present

**Number of credits:** 6

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

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 734

A	В	С	D	Е	FX
8.99	18.39	32.83	24.66	11.17	3.95

Provides: Ing. Katarína Bónová, PhD., Ing. Ján Bóna

Date of last modification: 11.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KGER/ Course name: Grammar in the German Language Communication
NJKG/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:
Course level: I., II.

Prerequisities:
Conditions for course completion:

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 46

A	В	С	D	Е	FX
54.35	13.04	8.7	4.35	10.87	8.7

Provides: Dr. rer. pol. Michaela Kováčová

Date of last modification: 05.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KFaDF/

Course name: Chapters from History of Philosophy of 19th and 20th

KDF/05

Centuries (General Introduction)

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:** 2.

Course level: I., II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 10

A	В	С	D	Е	FX
50.0	20.0	10.0	0.0	10.0	10.0

Provides: doc. PhDr. Pavol Tholt, PhD., mim.prof.

Date of last modification: 26.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** KFaDF/ **Course name:** Chapters from Philosophy of Education FVp/04 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: I., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 3  $\mathbf{C}$ Α В D Е FX 100.0 0.0 0.0 0.0 0.0 0.0 Provides: doc. PhDr. Pavol Tholt, PhD., mim.prof.

Date of last modification: 26.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

**Course name:** Chemical Engineering

ZCVU/04

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

**Number of credits: 5** 

Recommended semester/trimester of the course: 2.

Course level: II., III.

**Prerequisities:** 

**Conditions for course completion:** 

# **Learning outcomes:**

### **Brief outline of the course:**

General and Inorganic Engineering; Mineral raw materials; Raw materials processing, transport and holding; Chemical reactors; Chemical metallurgy – Fe, Al, Cu working; Inorganic acids manufacture (H2SO4, HNO3, HCl, HF, H3PO4); Industrial electrochemistry; Industrial fertilizers; Silicate industry – cement manufacture, ceramics; Petrochemistry

# **Recommended literature:**

### Course language:

#### **Notes:**

### **Course assessment**

Total number of assessed students: 5

A	В	С	D	Е	FX	N	Р
20.0	60.0	20.0	0.0	0.0	0.0	0.0	0.0

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

Date of last modification: 03.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

**Course name:** Chemical Excursion

CHE2/03

Course type, scope and the method:

**Course type:** Practice

Recommended course-load (hours): Per week: Per study period: 1t

Course method: present

**Number of credits: 4** 

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

Course level: II.

Prerequisities: ÚCHV/ACHU/03 or ÚCHV/ACH2/03

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 76

A	В	С	D	Е	FX
93.42	6.58	0.0	0.0	0.0	0.0

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

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ Course name: Chemistry and Didactics of Chemistry I

MSSU1/14

Course type, scope and the method:

Course type:

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

Per week: Per study period: Course method: present

Number of credits: 1

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

Course level: II.

Prerequisities: ÚCHV/VKAU/04 ÚCHV/DCH2/15 and

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 19

A	В	С	D	Е	FX
36.84	36.84	21.05	5.26	0.0	0.0

**Provides:** 

Date of last modification: 19.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Chemistry and Didactics of Chemistry II MSSU2/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present Number of credits: 1 Recommended semester/trimester of the course: Course level: II. Prerequisities: ÚCHV/VKOCH/03 and ÚCHV/DCH2/15 **Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 4 C A В D Е FX 100.0 0.0 0.0 0.0 0.0 0.0 **Provides:** 

Date of last modification: 19.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Child and Adolescent Sociology KPPaPZ/SDaM/09 Course type, scope and the method: Course type: Lecture **Recommended course-load (hours):** Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: 4. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** 

Course language:

**Notes:** 

### Course assessment

Total number of assessed students: 704

A	В	С	D	Е	FX
49.01	29.83	15.48	3.69	1.56	0.43

Provides: PhDr. Zlatica Buocová, CSc., Mgr. Alexander Onufrák, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ Course name: IB10 - Medzinárodný certifikát ECo-C IB10/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of credits: 16** Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** 

Date of last modification: 11.08.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ Course name: IB11 - Medzinárodný certifikát ECDL IB11/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present Number of credits: 14 Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** Date of last modification: 11.08.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ Course name: IB12 - Používanie, administrácia a vývoj v systéme SAP IB12/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present Number of credits: 54 Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** 

Date of last modification: 11.08.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ Course name: IB1 - Etika v biomedicínskych vedách pre zdravotnícku prax IB1/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of credits: 16** Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** 

Date of last modification: 11.08.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ | Course name: IB2 - Právne minimum – súkromnoprávne aspekty IB2/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of credits: 16** Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** Date of last modification: 11.08.2014

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Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ | Course name: IB3 - Právne minimum – verejnoprávne aspekty IB3/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of credits: 16** Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** Date of last modification: 11.08.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ | Course name: IB4 - Projektový manažment IB4/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present Number of credits: 20 Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** Date of last modification: 11.08.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ Course name: IB5 - Manažérska ekonomika IB5/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of credits: 16** Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** Date of last modification: 11.08.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

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University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: R UPJŠ/

Course name: IB6 - Riešenie konfliktných a krízových situácií v školskej

IB6/14

praxi

Course type, scope and the method:

**Course type:** 

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

Per week: Per study period: Course method: present

Number of credits: 16

Recommended semester/trimester of the course:

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

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 0

abs	n	neabs	
0.0	0.0	0.0	

**Provides:** 

Date of last modification: 11.08.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ | Course name: IB7 - Štatistika pre prax IB7/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of credits: 16** Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** Date of last modification: 11.08.2014

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ | Course name: IB8 - Environmentálne aspekty záťaže životného prostredia IB8/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present **Number of credits: 16** Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** Date of last modification: 11.08.2014

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Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: R UPJŠ/ Course name: IB9 - Medzinárodný certifikát TOEFL IB9/14 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present Number of credits: 17 Recommended semester/trimester of the course: Course level: I., I.II., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 0 abs neabs n 0.0 0.0 0.0 **Provides:** Date of last modification: 11.08.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

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University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KFaDF/ **Course name:** Idea Humanitas 1 (General Introduction) IH1/03 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: 2. Course level: I., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** 

Course assessment

Total number of assessed students: 9

A	В	С	D	Е	FX
55.56	11.11	0.0	11.11	22.22	0.0

Provides: Doc. PhDr. Peter Nezník, CSc.

Date of last modification: 26.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ | Course name: Immunology

IMU1/03

Course type, scope and the method:

Course type: Lecture

Recommended course-load (hours): Per week: 2 Per study period: 28

Course method: present

Number of credits: 3

Recommended semester/trimester of the course: 3.

Course level: II.

**Prerequisities:** 

## **Conditions for course completion:**

Recognition.

Oral examination.

## **Learning outcomes:**

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

## **Brief outline of the course:**

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

## **Recommended literature:**

Janeway Ch. A., Travers P., Walport M., Schlomchik M.: Immunobiology. Garland Science, 2004 Murphy, K. (2012): Jeneway's Immunobiology. 8th ed. Garland Science

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

## Course language:

Notes:

#### Course assessment

Total number of assessed students: 683

A	В	C	D	Е	FX
36.31	25.48	27.67	6.44	0.73	3.37

Provides: RNDr. Vlasta Demečková, PhD.

Date of last modification: 13.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Interim Pedagogical-Psychological Training MPPa/12 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: Per study period: 36s Course method: present Number of credits: 2 **Recommended semester/trimester of the course:** 1. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 691 abs n 99.86 0.14 Provides: PhDr. Beáta Gajdošová, PhD., PaedDr. Renáta Orosová, PhD., Mgr. Ján Juščák, PhD., Mgr. Zuzana Nováková, PhD. Date of last modification: 04.02.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

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	COURSE INFORMATION LETTER
University: P. J. Šafá	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚCHV/ UECH/03	Course name: Introduction to Environmental Chemistry
Course type, scope a Course type: Lectur Recommended cou Per week: 2 / 1 Per Course method: pre	re / Practice rse-load (hours): study period: 28 / 14
Number of credits: 5	
Recommended seme	ster/trimester of the course: 1.
Course level: I., II.	
Prerequisities:	
Conditions for cours Oral examination	se completion:
Learning outcomes: Introduction to topics protection.	s in environmental chemistry and basic procedures applied for environmental
atmosphere. Energy photoprocesses in the environmental pollut Environmental chem metals). Environmentals their protection. The utilization. Energy at	
Oxford University Pr 2. R.A. Bailey, H.M. Academic Press, San 3. G. Schwedt: The E 4. R.N. Reeve, J.D. E 5. G. Burton, J. Holn London 1994 6. www	, Stephen J. Duffy: Environmental Chemistry - A Global Perspective, ress, Oxford 2003 Clark, J.P. Ferris, S. Krause, R.L. Strong: Chemistry of the Environment,
Course language:	

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**Notes:** 

Course assessment							
Total number of assessed students: 189							
Α	В	С	D	Е	FX		
48.15	19.05	16.93	9.52	5.82	0.53		

**Provides:** RNDr. Andrea Straková Fedorková, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafá	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚCHV/ FUMCH1/03	Course name: Introduction to Material Chemistry
Course type, scope a Course type: Lectur Recommended cour Per week: 2/1 Per Course method: pre	re / Practice rse-load (hours): study period: 28 / 14
Number of credits: 5	;
Recommended seme	ster/trimester of the course: 1., 3.
Course level: I., II.	
Prerequisities:	
Conditions for cours Seminar work. Examination.	e completion:
Learning outcomes: To present the diffe properties.	rent types of functional materials, their atomic structure and mechanical
engineering. Material bonding. Amorphous Crystal lattice defects Deformations and fail Intermediary phases. Phase identification resteel. Light metals. Materials. Ceramic to Glass. Building binder	es. Materials and human being. Participation of natural science in material revolutions. Classification of materials. Atomic structure and interatomic and crystalline materials. Mechanics of materials. Imperfections in solids. Point defects. Line defects. Dislocations. Diffusion. Diffusion mechanisms. ilures, re-crystallization. Deformations. Plastic deformations. Solid solutions. Phases in ceramic systems. Phase transformations. Crystallization of metals. methods. Stress and strain. Structure of metallic and ceramic materials. Alloys. Metallic glasses. Gold. Inorganic non-metallic materials. Ceramic construction pols. Bio-ceramics. Ceramics in cosmos. High-temperature superconductors. ers. Polymers. Essence of polymers. Thermoplastics. Reactoplastics. Polymer I properties of polymers. Natural materials. Wood. Bones. Teeth. Conchs and
2001. Brian S. Mitchell: Ar Materials Engineers,	undamentals of Materials Science and Engineering, John Wiley & Sons,  Introduction to Materials Engineering and Science: For Chemical and
2004. Course language:	

Page: 78

**Notes:** 

Course assessment Total number of assessed students: 49						
A	В	С	D	Е	FX	
85.71	12.24	0.0	0.0	0.0	2.04	

Provides: doc. RNDr. Renáta Oriňáková, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Introduction to Structure Analysis USA/03 Course type, scope and the method: Course type: Lecture / Practice **Recommended course-load (hours):** Per week: 2 / 1 Per study period: 28 / 14 Course method: present **Number of credits: 5 Recommended semester/trimester of the course:** 1. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 1 C A В D Е FX 0.0 100.0 0.0 0.0 0.0 0.0 Provides: doc. RNDr. Ivan Potočňák, PhD. Date of last modification: 03.02.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

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University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Methodology of Chemistry Teaching I

DCHa/03

Course type, scope and the method:

Course type: Lecture / Practice

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

Course method: present

**Number of credits: 3** 

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities: ÚCHV/SPC1a/03

## **Conditions for course completion:**

Seminar work
Oral examination

## **Learning outcomes:**

The aim of this subject is to apply the pedagogical, psychological and didactic relation of education with connection to theory and praxis. It is meant for education of chemistry on primary and secondary school.

## **Brief outline of the course:**

Methodology of Teaching Chemistry as Science and as object of Teaching. Select, structural, compassion, documentation of curriculum chemistry, concretization of pedagogical-educational aims. View of forms Teaching chemistry, methods of Teaching and means disclosure of curriculum on the concrete subject of curriculum secondary chemistry. Complex summary of use material didactic resources in the academic too contemporary forms Teaching of chemistry. The use of didactic technology in theoretical and experimental Teaching of chemistry. Hobby and out of school activities in chemistry.

## **Recommended literature:**

- 1. Ganajová, M.: Vybrané kapitoly zo všeobecnej didaktiky chémie, UPJŠ Košice 2009, ISBN 978-80-7097-756-9
- 2. Ganajová, M., Kalafutová, J.: http://moodle.science.upjs.sk e-kurz: Vybrané kapitoly zo všeobecnej didaktiky chémie pre rok 2008/2009

# Course language:

# **Notes:**

## Course assessment

Total number of assessed students: 238

A	В	С	D	Е	FX
68.07	18.91	6.72	3.78	1.68	0.84

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Methodology of Chemistry Teaching II

DCHb/03

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: 5** 

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚCHV/DCHa/03

## **Conditions for course completion:**

Seminar work
Oral examination

## **Learning outcomes:**

The aim of this subject is an analysis of a concrete theme and themes of chemistry curriculum meant for secondary school. Students should familiarize with contents, selected teaching methods and possibility of ICT applying in chemistry education

## **Brief outline of the course:**

Didactic of Atomic structure

Didactic of Molecular structure and chemical bonding

Didactic of Chemical action

Didactic of Periodic system of elements

Didactic of Chemical thermodynamics and kinetics

Didactic of Organic chemistry

Didactic of Chemistry of common life

## **Recommended literature:**

- 1. Pachman E. a kol.: Speciální didaktika chemie. SPN Praha 1986.
- 2. Smik L. a kol.: Špeciálna didaktika chémie. Učebný text I. a II. UPJŠ 1984.
- 3. Pfeifer P.: Konkrete Fachdidaktik Chemie Oldenbourg Verlag GmbH. München 1992.
- 4. The primary and secondary textbook of chemistry
- 5. Journals: J. Chem. Educ., Chemie in der Schule, Přírodní vědy šk.

#### Course language:

#### **Notes:**

#### Course assessment

Total number of assessed students: 200

A	В	С	D	Е	FX
61.5	21.5	12.5	2.5	2.0	0.0

Page: 83

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

	COURSE IN ORMATION LETTER
University: P. J. Šafa	árik University in Košice
Faculty: Faculty of S	Science
Course ID: ÚFV/ FEP1/07	Course name: Microcomputer Based Science Laboratory
Course type, scope : Course type: Lectu Recommended cou Per week: 1/2 Per Course method: pr	re / Practice rse-load (hours): study period: 14 / 28
Number of credits:	4
Recommended sem	ester/trimester of the course:
Course level: II.	
Prerequisities:	
points	
active learning in so the help of datalogg	lent gains an overview about the possible use of digital technologies to support cience. He gains skills to use and develop activities on measuring data with ing, measuring on picture and viderecording and modeling natural processes. implement such activities in science teaching to support active learning and
in science with the modeling is based carry out computer-b corresponding mode	rse is to present the use of digital technologies to enhance active learning help of datalogging, videomeasurement and modeling tools. Mathematical on dynamical modeling of natural phenomena. Within the course students based experiments, videomeasurements and measurement on picture and create els. The activities involve selected topics of secondary schools science. The the methods of implementation of the activities with regard to active students
podporovanom labo [2]Príručka COACH [3]http://physedu.sci	n, I.: Fyzikálne experimenty a modely v školskom mikropočítačom ratóriu, Univerzita Komenského, Bratislava, 1999
Course language: Slovak	

Page: 85

**Notes:** 

Course assessment							
Total number of	Total number of assessed students: 34						
A	В	С	D	Е	FX		
44.12	44.12	11.76	0.0	0.0	0.0		

Provides: doc. RNDr. Zuzana Ješková, PhD.

Date of last modification: 18.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚFV/ Course name: Modern Didactical Technics MDT06/06 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: Course level: I., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 76  $\mathbf{C}$ A В D Е FX 97.37 1.32 0.0 1.32 0.0 0.0

Provides: doc. RNDr. Marián Kireš, PhD.

Date of last modification: 18.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice						
Faculty: Faculty of S	cience					
Course ID: ÚTVŠ/ NJ//13	Course name: Naval Yacl	nting				
Course type, scope a Course type: Practic Recommended cou Per week: 36 Per st Course method: pre	ce rse-load (hours): udy period: 504 esent					
Number of credits: 2	2					
Recommended seme	ster/trimester of the cours	se:				
Course level: I., II.						
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: 2					
	abs	n				
100.0 0.0						
Provides: doc. Mgr. 1	Provides: doc. Mgr. Rastislav Feč, PhD.					
Date of last modifica	ation: 15.01.2014					
<b>Approved:</b> doc. RNI Volodymyr Starosta, I	•	oc. RNDr. Katarína Kimáková, CSc., prof.				

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: New Trends in Chemistry Teaching

NTVC/06

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

**Number of credits: 5** 

Recommended semester/trimester of the course: 2.

Course level: II.

**Prerequisities:** 

## **Conditions for course completion:**

Seminar work

Oral examination

## **Learning outcomes:**

The aim of this subject is to acquaint future teachers of chemistry with brand new trends of education in European Union countries.

#### **Brief outline of the course:**

Chemistry of everyday life both at home and abroad, educational texts, chemical experiments, CD-ROMs, Chemistry Nourishes Us, Chemistry of Water, Soil and Air

Chemical experiments of everyday life connected with the themes such as Chemistry Nourishes Us, Cosmetic Chemistry, Acids and Bases of Common Life, Project-based learning in chemistry, Teleprojects in chemistry, Using ICT in the teaching of themes: Chemical experiments of everyday life, Vitamins, Mineral substances and Mineral water

#### **Recommended literature:**

- 1. Ganajová, M. 2005: Chemické experimenty s vybranými produktami z obchodu. UPJŠ v Košiciach, Prírodovedecká fakulta, 110 s. ISBN 80-7097-611-X
- 2. Obendrauf, V., Becker, R., Ganajová, M., Dunčková, I., Müllerová, V., Kövaryová, E.: Chémia dnes. Košice: Prírodovedecká fakulta UPJŠ, 2001. 80s. ISBN 80-7097-472-9
- 3. http://kekule.science.upis.sk

## Course language:

Notes:

## **Course assessment**

Total number of assessed students: 74

Α	В	С	D	Е	FX
93.24	5.41	1.35	0.0	0.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová

Date of last modification: 03.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚINF/ Course name: Pedagogical software

PES1/04

Course type, scope and the method:

Course type, losture / Practice

Course type, scope and the method:
Course type: Lecture / Practice
Recommended course-load (hours):
Per week: 1 / 2 Per study period: 14 / 28

**Course method:** present

Number of credits: 4

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

Course level: II.

# **Prerequisities:**

## **Conditions for course completion:**

Assessment of preliminary assignments - a review of selected educational software, specification of own educational software.

In final exam students will demonstrate an overview of types, evaluation and life cycle of educational software in written form and they will present and defend their own final project - educational interactive hypertext project (containing motivation, interactive simulation, collection of tasks, vocabulary, autotest), respectively an educational game (labyrinth, pexeso, quiz, crossword, interactive story, simulation) including methodological guide for teachers.including methodological guide for teachers.

## **Learning outcomes:**

- To acquire an overview of the types of educational software, its evaluation, process development and use in education.
- To create your own educational interactive hypertext, respectively an educational game including methodological guide for teachers.

#### **Brief outline of the course:**

Typology of educational software, its evaluation, process development and use in education. Creation of educational interactive hypertext (containing motivation, interactive simulation, collection of tasks, vocabulary, autotest), respectively an educational game (labyrinth, pexeso, quiz, crossword, interactive story, simulation) including methodological guide for teachers.

#### **Recommended literature:**

LACHS, V. Making Multimedia in the Classroom. London: RoutledgeFalemer, 2000. ISBN 0415216842.

GÖBEL, S. et al. Technologies for Interactive Digital Storytelling and Entertainment (LNCS 4326). Darmstadt: Springer, 2006. ISBN 3540499342.

SCHURMANN, E. M., PARDI, W. J. Dynamické HTML v akci. Praha: Computer Press, 2001. ISBN 807226401X.

KOSEK, J. Téměř vše o WWW. [online] Dostupné na internete: <a href="http://www.kosek.cz">http://www.kosek.cz</a>.

## Course language:

#### **Notes:**

Course assessment							
Total number of	Total number of assessed students: 94						
A	В	C	D	Е	FX		
23.4	28.72	26.6	8.51	10.64	2.13		

**Provides:** RNDr. L'ubomír Šnajder, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: KPE/

Course name: Pedagogy and Psychology

PP/14

Course type, scope and the method:

**Course type:** 

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

Per week: Per study period: Course method: present

Number of credits: 1

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

Course level: II.

Prerequisities: KPE/VPD/03 and KPPaPZ/PPGS/04 or KPPaPZ/PaSPP/09

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 133

Α	В	С	D	Е	FX
16.54	30.83	28.57	21.05	1.5	1.5

**Provides:** 

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: KPE/ Course name: Pedagogy of Leisure Time PVC/09 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:** 3. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 222  $\mathbf{C}$ Α В D Е FX 75.68 16.67 6.31 0.0 0.0 1.35

Provides: Mgr. Ján Juščák, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: Dek. PF

Course name: Personality Development and Key Competences for Success

UPJŠ/PPZ/13

on a Labour Market

Course type, scope and the method:

Course type: Practice

Recommended course-load (hours): Per week: Per study period: 14s

Course method: present

Number of credits: 2

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

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 39

A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: RNDr. Peter Stefányi, PhD.

Date of last modification: 17.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ | Course name

FG1/03

**Course name:** Phytogeography

Course type, scope and the method:

Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

**Number of credits: 5** 

Recommended semester/trimester of the course: 3.

Course level: I., II.

**Prerequisities:** 

## **Conditions for course completion:**

Written work.

Exam.

## **Learning outcomes:**

To obtain theoretical and practical knowledge from phytogeography.

#### **Brief outline of the course:**

History of phytogeography. Plants and environment. Chorology, area, area disjunctions, relics, endemites, vicariancy, floral elements. Main course of florogenesis since paleozoic to quaternary ages. Postglacial evolution of Slovak vegetation. Regional phytogeography of Earth. Vegetation geography: from tropical rainforests to tundras. Changes of earth vegetation and their study. Geographical origin of cultivated plants.

Practices: Fieldworks. Preparing of maps. Phytogeographical division of Slovakia. Students seminar works on phytogeography.

#### **Recommended literature:**

Hendrych R.: Fytogeografie. - SPN, Praha 1984.

Brown J. H., Lomolino M. V.: Biogeography. - Sinauer Associates, Sunderland, 1998.

## Course language:

#### Notes:

#### Course assessment

Total number of assessed students: 249

A	В	С	D	Е	FX
41.77	22.09	21.69	6.02	6.83	1.61

Provides: prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčik, PhD.

Date of last modification: 13.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

**Course ID:** 

**Course name:** Psychology and Educational Psychology

KPPaPZ/PPGS/04

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: 5** 

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

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 790

A	В	С	D	Е	FX
10.13	17.22	21.39	22.03	24.81	4.43

**Provides:** Prof. PhDr. Ol'ga Orosová, CSc., PhDr. Karolína Barinková, PhD., Mgr. Lucia Hricová, PhDr. Anna Janovská, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚTVŠ/ Course name: Seaside Aerobic Exercise ÚTVŠ/CM/13 Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 36 Per study period: 504 Course method: present Number of credits: 2 Recommended semester/trimester of the course: Course level: I., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 7 abs n 57.14 42.86 Provides: Mgr. Alena Buková, PhD., Mgr. Agata Horbacz, PhD. Date of last modification: 15.01.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

**Course name:** Selected Topics in Analytical Chemistry

VKACH/03

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

**Number of credits: 5** 

Recommended semester/trimester of the course: 3.

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

# **Learning outcomes:**

#### **Brief outline of the course:**

Classical methods of analytical chemistry - volumetric analysis, gravimetry. Review of analytical instrumental methods. New analytical techniques for characterization and identifications of analytes.

#### **Recommended literature:**

Skoog D.A.: Principles of Instrumental Analysis. Saunders Col. Publishing, New York 1985.

D.Harvey: Modern Analytical Chemistry. McGraw Hill, Boston, 2000.

# Course language:

**Notes:** 

## Course assessment

Total number of assessed students: 3

A	В	С	D	Е	FX
100.0	0.0	0.0	0.0	0.0	0.0

Provides: doc. RNDr. Taťána Gondová, CSc.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ | Course name: Selected Topics in Inorganic Chemistry

VKA/04

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 5

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

Course level: II.

**Prerequisities:** 

## **Conditions for course completion:**

# **Learning outcomes:**

To make the acquaintance of actual status of research in inorganic chemistry.

## **Brief outline of the course:**

Cu-Zn heterobimetallic compounds: preparation, structure and properties.

Biological and physicochemical properties of some zinc komplex compounds with bioactive ligands.

Pentacoordinated Copper(II) compounds: a trigonal bipyramid or a tetragonal pyramid?

Structure, spectral and thermal properties of cyanoargentates.

Hydrothermal synthesis in inorganic chemistry.

Materials on the basis of inclusion compounds, their structure, properties and application.

#### **Recommended literature:**

- 1. Greenwood, N.N., Earnshaw, A.: Chemistry of the elements I and II, Pergamon Press N.Y., 1993
- 2. J. E. Huheey, E.A. Keiter, R.L. Keiter: Inorganic Chemistry: Principles of Structure and Reactivity (4th Edition, Addison-Wesley Pub Co, 4th edition, 1997

#### Course language:

#### Notes:

#### Course assessment

Total number of assessed students: 197

A	В	С	D	Е	FX
41.62	27.41	17.77	8.12	5.08	0.0

**Provides:** prof. RNDr. Juraj Černák, CSc., prof. RNDr. Katarína Györyová, DrSc., doc. RNDr. Vladimír Zeleňák, PhD., doc. RNDr. Zuzana Vargová, Ph.D., doc. RNDr. Ivan Potočňák, PhD., doc. RNDr. Jozef Chomič, CSc., doc. RNDr. Mária Reháková, CSc., RNDr. Juraj Kuchár, PhD.

Date of last modification: 03.02.2014

Page: 100

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚCHV/ Course name: Selected topics in organic chemistry VKOCH/03 Course type, scope and the method: Course type: Lecture / Practice **Recommended course-load (hours):** Per week: 2 / 1 Per study period: 28 / 14 Course method: present **Number of credits: 5 Recommended semester/trimester of the course:** 3. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 74 C Α В D Е FX 35.14 17.57 21.62 17.57 8.11 0.0

Provides: doc. RNDr. Ján Imrich, CSc.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

	COURSE INFORMATION LETTER
University: P. J. Šafá	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚBEV/ VCD1/03	Course name: Selected topics of biology teaching
Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: pre	ce rse-load (hours): dy period: 28
Number of credits: 3	
Recommended seme	ster/trimester of the course: 3.
Course level: II.	
Prerequisities: ÚBEV	V/DIB1/03
Conditions for cours Colloquium - present	e completion: ation of seminar work.
<b>Learning outcomes:</b> Extension skills of ne	ew teaching methods and selected practical activities.
<ul><li>The development of</li><li>New approaches to</li><li>New educational ted</li><li>Different ways of w</li></ul>	t - partners in learning. If science skills through IBSE. If formative and summative assessment in IBSE. It chnologies supporting IBSE. If orking with text in the subject of biology. It and cooperative methods for biology lessons.
Kimáková, K., Dunay MC Prešov, 2001 Švecová, M.: Teorie a Karolinum Praha 200 Hudáková, A., Kimál Košice 2005 Periodical publication	do štúdia didaktiky biológie, elektronický študijný text, 2008 yová, D., Luczyová P.: Inovačné metódy vyučovania prírodopisu a biológie, a praxe zařazení školních projektů ve výuce přírodopisu a biologie,
Course language:	

**Notes:** 

Course assessment						
Total number of assessed students: 130						
A	В	C	D	Е	FX	
54.62	36.15	7.69	1.54	0.0	0.0	

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

Date of last modification: 13.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ Co

**Course name:** School experiments and observations

SPP/08

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., 3.

Course level: II.

# **Prerequisities:**

## **Conditions for course completion:**

Realisation of didactic analysis after conducted experiments and observations.

## **Learning outcomes:**

Preparing students for the implementation of biological school experiments and observations.

## **Brief outline of the course:**

The course is aimed at training and application skills that are necessary for the implementation of experiments and observations in the classroom. It helps students develop theoretical knowledge in practical work during training and familiarizes them with didactic methods in demonstrating the biological observation and educational experiments. It focuses on the possibilities of applying these methods in the various stages of a teaching unit.

## **Recommended literature:**

HUDÁKOVÁ, A., KIMÁKOVÁ, K. 2005. Demonštračné pokusy a pozorovania z biológie rastlín. Košice: UPJŠ; Prírodovedecká fakulta, 84 s. ISBN 80-7097-610-1. Internal study materials in Moodle https://lms.upjs.sk/login/index.php

## Course language:

#### Notes:

# Course assessment

Total number of assessed students: 52

A	В	C	D	Е	FX
65.38	19.23	13.46	1.92	0.0	0.0

Provides: RNDr. Ivana Slepáková, PhD., PaedDr. Andrea Lešková, PhD.

Date of last modification: 13.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

Volodymyr Starosta, DrSc.

Page: 105

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: Social-Psychological Training of Coping with Critical Life KPPaPZ/SPVKE/07 Situations 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:** 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 101 abs n  $\mathbf{Z}$ 97.03 2.97 0.0 **Provides:** 

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Special practising the school experiments I

SPC1a/03

Course type, scope and the method:

**Course type:** Practice

Recommended course-load (hours): Per week: 4 Per study period: 56

Course method: present

**Number of credits: 5** 

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

Course level: II.

# **Prerequisities:**

## **Conditions for course completion:**

Continuous checking of theoretical preparation, development of report and presentation. Semestral test

## **Learning outcomes:**

The aim of this subject is learn of basic experimental skillfulness in techniques in school experiment with accent on safety and health protections of students at scholar experimental work.

#### **Brief outline of the course:**

Selection and arrangement of chemical experiments as the demonstrative experiments, or pupils 'experiments to themes basic laws of chemistry, determination of constant physicochemical, factors influence speed of chemical reaction, experiments from electrochemistry, creating gases; preparation works characters of quantitative, interesting experiments of everyday life.

#### **Recommended literature:**

- 1. Ganajová, M., Dzurillová, M. 2005: Školské pokusy z chémie I. UPJŠ v Košiciach, Prírodovedecká fakulta, 140 s. ISBN 80-7097-617-9
- 2. Ganajová, M. 2005: Chemické experimenty s vybranými produktami z obchodu. UPJŠ v Košiciach, Prírodovedecká fakulta, 110 s. ISBN 80-7097-611-X
- 3. Tomeček,O.: Školská experimentálna semimikrosúprava. Učebné pomôcky Banská Bystrica 1980
- 4. The primary and secondary textbook of chemistry
- 5. http://kekule.science.upjs.sk (ŠIS)

# Course language:

#### **Notes:**

## Course assessment

Total number of assessed students: 181

A	В	С	D	Е	FX
61.88	29.83	7.18	1.1	0.0	0.0

Provides: doc. RNDr. Mária Ganajová, CSc., RNDr. Milena Kristofová

Page: 107

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Special practising the school experiments II

SPC1b/03

Course type, scope and the method:

**Course type:** Practice

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

Course method: present

Number of credits: 3

Recommended semester/trimester of the course: 2.

Course level: II.

# **Prerequisities:**

#### **Conditions for course completion:**

The knowledge of the reaction mechanism of the main tests of several organic compounds derivatives and the ability of their laboratory realization are required. Written tests: more than 50% from each one is required.

# **Learning outcomes:**

The students will become familiar with the basic laboratory skills and techniques that they can apply in demonstrating experiments in their future career as a teacher. The rules of healthy and safety laboratory work are emphasised.

#### **Brief outline of the course:**

Qualitative analysis of organic compounds

Alkanes - preparation of methane

Alkenes preparation and addition reactions of ethene, addition reaction of  $\beta$ -carotene

Alkynes, Aromatic hydrocarbons and their derivatives – preparation of benzene, aromatic electrophilic substitution reactions – nitration of toluene and naphthalene, preparation of benzyl bromide

Halogenoderivatives – preparation of chloroethane, chloroform, methyl iodide, iodoform

Hydroxoderivatives – properties and reactivity - methanol, ethanol, ethylene glycol, glycerol, preparation of sodium ethanolate and sodium phenoxide, bromation of phenol, colour reactions of phenols, naphtols

Oxoderivatives – diethyl ether – preparation and properties, Aldehydes and Ketones – preparation of formaldehyde, oxidation of formaldehyde, acetone – addition of sodium hydrogensulfite

Carboxylic acids and their derivatives – preparation and properties of soap

Natural compounds – carbohydrates, proteins, amino acids, lipids

Factors that affect the rate of chemical reactions – temperature and concentration

Isolation of the fragrant components using steam distillation

#### **Recommended literature:**

- 1. Smik, L., Merva, L., Brutovská, A: Technika a didaktika školských pokusov, Vyd.Rektorát UPJŠ,Košice,1988
- 2. Smik, L. a kol.: Špeciálna didaktika chémie II., Vyd. Rektorát UPJŠ, Košice, 1984
- 3. Internal scripts -Školské pokusy z organickej chémie

# Course language:

slovak

**Notes:** 

# **Course assessment**

Total number of assessed students: 160

A	В	С	D	Е	FX
33.75	29.38	20.0	11.88	5.0	0.0

**Provides:** RNDr. Jana Špaková Raschmanová, PhD., RNDr. Ján Elečko, RNDr. Margaréta Takácsová, RNDr. Kvetoslava Stanková, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

**Course name:** Special Toxicology

STOX/04

Course type, scope and the method:

Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

**Number of credits: 5** 

Recommended semester/trimester of the course: 3.

Course level: II.

Prerequisities: ÚCHV/ZTOX/04

#### **Conditions for course completion:**

## **Learning outcomes:**

Goal of the course is to provide the students with a knowledge of toxicology of organic and inorganic compounds, drugs, food additives, e.g., safety of substances, designation of substances in accordance of norm of European Union and order of Government of Slovak Republic.

#### **Brief outline of the course:**

Goal of the course is to provide the students with a knowledge of toxicology of organic and inorganic compounds, drugs, food additives, e.g., safety of substances, designation of substances in accordance of norm of European Union and order of Government of Slovak Republic.

#### **Recommended literature:**

- J. A. Timbrell: Introduction to Toxicology, Taylor and Francis, London 1989.
- H. Kenneth Dillon, Mat H. Ho: Biological Monitoring of Exposure to

Chemicals: Metals, John Wiley & Sons, New York 1991.

- V. E. Forbes, T. L. Forbes: Toxicology in Theory and Practice, Chapmane Hall, London 1994.
- H. M. Stahr: Analytical Methods in Toxicology, John Wiley & Sons, New York 1991.

# Course language:

# **Notes:**

#### Course assessment

Total number of assessed students: 192

A	В	С	D	Е	FX
50.52	23.96	17.19	6.25	2.08	0.0

**Provides:** prof. RNDr. Katarína Györyová, DrSc.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ Course n

Course name: Sports Activities I.

TVa/11

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: I., I.II., II.

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 7160

abs	n	neabs
88.42	7.82	3.76

**Provides:** PaedDr. Imrich Staško, doc. PhDr. Ivan Šulc, CSc., doc. Mgr. Rastislav Feč, PhD., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, Mgr. Peter Bakalár, PhD., doc. PaedDr. Ivan Uher, PhD., PaedDr. Milena Švedová, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško

Date of last modification: 15.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ Course name

TVb/11

Course name: Sports Activities II.

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:** 2.

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

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 6364

abs	n	neabs
84.95	11.06	3.99

**Provides:** PaedDr. Imrich Staško, doc. Mgr. Rastislav Feč, PhD., doc. PhDr. Ivan Šulc, CSc., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, doc. PaedDr. Ivan Uher, PhD., Mgr. Peter Bakalár, PhD., PaedDr. Milena Švedová, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško

Date of last modification: 15.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ | Course name: Sports Activities III.

TVc/11

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:** 3.

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

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

**Course language:** 

**Notes:** 

Course assessment

Total number of assessed students: 4191

abs	n	neabs
89.91	4.72	5.37

**Provides:** PaedDr. Imrich Staško, doc. Mgr. Rastislav Feč, PhD., doc. PhDr. Ivan Šulc, CSc., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, doc. PaedDr. Ivan Uher, PhD., PaedDr. Milena Švedová, PhD., Mgr. Peter Bakalár, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško

Date of last modification: 15.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚTVŠ/ Co

Course name: Sports Activities IV.

TVd/11

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: 4.

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

**Prerequisities:** 

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 3363

abs	n	neabs
86.14	6.78	7.08

**Provides:** PaedDr. Imrich Staško, doc. Mgr. Rastislav Feč, PhD., doc. PhDr. Ivan Šulc, CSc., Mgr. Ivan Matúš, PhD., Mgr. Zuzana Küchelová, PaedDr. Milena Švedová, PhD., Mgr. Peter Bakalár, PhD., doc. PaedDr. Ivan Uher, PhD., Mgr. Agata Horbacz, PhD., Mgr. Marek Valanský, Mgr. Dávid Kaško

Date of last modification: 15.01.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

**Course name:** Stereochemistry of Inorganic Compounds

SAZ1/03

Course type, scope and the method:

Course type: Practice

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

Course method: present

Number of credits: 4

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

Course level: II.

**Prerequisities:** 

**Conditions for course completion:** 

# **Learning outcomes:**

#### **Brief outline of the course:**

Symmetry, elements of symmetry, point groups, symmetrical properties of orbitals and bonds. Principles of stereochemistry, VSEPR, configuration of molecules, polyhedra, regular and semiregular polyhedra. Valence shells with 4–12 electron pairs, geometry of molecules and periodic system.

# **Recommended literature:**

Kepert, D. L.: Inorganic Stereochemistry. Springer-Verlag, Berlin, 1982.

Kettle, S. F. A.: Symmetry and Structure. John Wiley & Sons, New York, 1985.

# Course language:

#### **Notes:**

#### Course assessment

Total number of assessed students: 41

A	В	С	D	Е	FX
58.54	21.95	17.07	0.0	2.44	0.0

Provides: doc. RNDr. Vladimír Zeleňák, PhD.

Date of last modification: 03.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚBEV/ Course name: Student Scientific Conference SVK/01 Course type, scope and the method: **Course type: Recommended course-load (hours):** Per week: Per study period: Course method: present Number of credits: 4 Recommended semester/trimester of the course: 2. Course level: I., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 175 C A В D Е FX 100.0 0.0 0.0 0.0 0.0 0.0 **Provides:** Date of last modification: 13.02.2014

Page: 117

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚTVŠ/ Course name: Summer Course-Rafting of TISA River LKSp//13 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 36 Per study period: 504 Course method: present Number of credits: 2 Recommended semester/trimester of the course: Course level: I., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 63 abs n 41.27 58.73 Provides: Mgr. Peter Bakalár, PhD. Date of last modification: 15.01.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚTVŠ/ Course name: Survival Course KP/12 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 36 Per study period: 504 Course method: present Number of credits: 2 Recommended semester/trimester of the course: Course level: I., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 185 abs n 41.62 58.38 Provides: Mgr. Marek Valanský Date of last modification: 15.01.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science **Course ID:** Course name: The Art of Aiding by Verbal Exchange KPPaPZ/UPR/03 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: 2., 4. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 47 C Α В D Е FX 87.23 4.26 0.0 4.26 2.13 2.13

Provides: Mgr. Ondrej Kalina, PhD.

Date of last modification: 04.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚFV/ Course name: Using Multimedia in Education VMV1/04 Course type, scope and the method: Course type: Lecture / Practice **Recommended course-load (hours):** Per week: 1/2 Per study period: 14/28 Course method: present Number of credits: 4 **Recommended semester/trimester of the course:** 2. Course level: II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 85  $\mathbf{C}$ Α В D Е FX 85.88 10.59 0.0 0.0 2.35 1.18

Provides: doc. RNDr. Marián Kireš, PhD., RNDr. Rastislav Adamek, PhD.

Date of last modification: 18.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/

Course name: Vybrané kapitoly z chémie

VKCH/10

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14

Course method: present

Number of credits: 4

Recommended semester/trimester of the course: 1.

Course level: II.

**Prerequisities:** 

#### **Conditions for course completion:**

Terminal examination by written form.

# **Learning outcomes:**

Organic chemistry:

The general review on the basic chemistry of saccharides, lipids, amino acids and peptides.

Inorganic chemstry:

To get acquaintance of the students with the stereochemistry of inorganic compounds, methods of the study and its influence on the properties of the compounds. Moreover to get acquintance of the students with actual direction of inorganic chemistry in the area of nanomaterials.

# **Brief outline of the course:**

Organic chemistry:

Nomenclature of monosaccharides, their stereochemistry (the Fischer projection, the Haworth projection, conformation of sugars). Monosaccharide derivatives. Ascending reactions. Oligosaccharides and polysaccharides.

Lipids, their structure and classification. Groups of lipids. Triacylglycerols, glycerophospholipids sfingophospholipids, glycosphingolipids.

Amino acids, their nomenclature, classification and stereochemistry. Synthesis of amino acids. Nonribosomal construction of peptides.

Inorganic chemistry:

Symmetry, elements of symmetry, point groups, symmetrical properties of orbitals and bonds. Principles of stereochemistry, VSEPR, configuration of molecules, polyhedra, regular and semiregular polyhedra, the use of concept of symmetry in IR and UV-VIS spectroscopy. Nanochemistry - definition, bonds in nanoparticles and nanopowders, interactions between nanoparticles. Unique properties of nanomaterials, new methods of the synthesis of nanomaterials.

#### **Recommended literature:**

- J. McMurry: Organic chemistry, Brooks/Cole, a Thomson Learning Company 2004, Sixth Eddition, ISBN 0534389996.
- J. Chomič: Stereochemistry of inorganic compounds, UPJŠ Košice, 1988.
- K. J. Klabunde, R. M. Richards: Nanoscale Materials in Chemistry, Wiley-CH, 2009.

# Course language:

**Notes:** 

# **Course assessment**

Total number of assessed students: 101

A	В	С	D	Е	FX
16.83	20.79	36.63	20.79	3.96	0.99

**Provides:** doc. RNDr. Mária Kožurková, CSc., doc. RNDr. Vladimír Zeleňák, PhD., doc. RNDr. Miroslava Martinková, PhD.

Date of last modification: 03.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice Faculty: Faculty of Science Course ID: ÚTVŠ/ Course name: Winter Ski Training Course ZKLS//13 Course type, scope and the method: Course type: Practice **Recommended course-load (hours):** Per week: 36 Per study period: 504 Course method: present Number of credits: 2 Recommended semester/trimester of the course: Course level: I., II. **Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Recommended literature:** Course language: **Notes:** Course assessment Total number of assessed students: 59 abs n 25.42 74.58 Provides: PaedDr. Imrich Staško, doc. PhDr. Ivan Šulc, CSc. Date of last modification: 15.01.2014 Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof. Volodymyr Starosta, DrSc.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚCHV/ Co

Course name: Xenobiochemistry

XBCH/04

Course type, scope and the method:

Course type: Lecture

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

Course method: present

Number of credits: 5

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

Course level: II.

**Prerequisities:** 

# **Conditions for course completion:**

test

# **Learning outcomes:**

Students obtained modern knowledge of xenobiotics metabolism in living organisms

# **Brief outline of the course:**

Characterization of metabolism of xenobiotics in the liver. The basic types of biotransformation reactions - oxidation, reduction, hydrolysis, conjugation. Biotransformation enzymes. Free radicals and their effects, lipid peroxidation.

## **Recommended literature:**

Z. Ďuračková: Voľné radikály a antioxidanty v medicíne, Slovak akademik press 1998.

Z. Vodrážka: Biochémia, Praha, 1996.

A. Jindra: Biochémia, molekulárnobiologické a farmakologické aspekty, Praha, 1985.

# Course language:

## **Notes:**

#### Course assessment

Total number of assessed students: 32

A	В	С	D	Е	FX
59.38	21.88	12.5	3.13	3.13	0.0

Provides: RNDr. Danica Sabolová, PhD.

Date of last modification: 03.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

Volodymyr Starosta, DrSc.

Page: 125

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

Course language:

**Notes:** 

Course assessment					
Total number of assessed students: 692					
A	В	C	D	Е	FX
20.66	23.41	25.0	20.09	8.09	2.75

**Provides:** doc. RNDr. Ľubomír Kováč, CSc.

Date of last modification: 13.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/

Course name: Zoológia II (pre magisterské štúdium)

ZOO1/11

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: 5** 

Recommended semester/trimester of the course: 2.

Course level: II.

Prerequisities: ÚBEV/ZO1/04

**Conditions for course completion:** 

**Learning outcomes:** 

**Brief outline of the course:** 

**Recommended literature:** 

Course language:

**Notes:** 

Course assessment

Total number of assessed students: 39

A	В	С	D	Е	FX
12.82	35.9	23.08	7.69	20.51	0.0

Provides: RNDr. Peter L'uptáčik, PhD., RNDr. Marcel Uhrin, PhD.

Date of last modification: 13.02.2014

Approved: doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

University: P. J. Šafárik University in Košice

Faculty: Faculty of Science

Course ID: ÚBEV/ | Course name

ZO1/04

Course name: Zoology I

Course type, scope and the method: Course type: Lecture / Practice

Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28

Course method: present

**Number of credits: 5** 

Recommended semester/trimester of the course: 1.

Course level: II.

**Prerequisities:** 

# **Conditions for course completion:**

## **Learning outcomes:**

Basis of Invertebrata taxonomy including taxonomy of Monocytozoa. Importance and function of chosen individual taxons. Phylogenetic relations.

# **Brief outline of the course:**

Anatomy, morphology and development of separate groups of Invertebrates – especially Porifera, Cnidaria, Plathelminthes, Nemathelminthes, Mollusca, Anelida, Arthropoda, Echinodermata. Characteristic species.

#### **Recommended literature:**

Meglitsch, P.A.: Invertebrate Zoology. Oxford University Press. New York, Oxford, 1991 Brusca, R. C., Brusca, G. J.: Invertebrates. Massachusetts, 1990

Course language:

**Notes:** 

#### Course assessment

Total number of assessed students: 1047

Α	В	С	D	Е	FX
7.55	16.14	20.92	20.06	25.69	9.65

Provides: doc. RNDr. L'ubomír Panigaj, CSc., RNDr. Peter L'uptáčik, PhD.

Date of last modification: 13.02.2014

**Approved:** doc. RNDr. Mária Ganajová, CSc., doc. RNDr. Katarína Kimáková, CSc., prof.

Volodymyr Starosta, DrSc.

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