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## COURSE INFORMATION LETTER

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

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** KPE/  
ALP/06

**Course name:** Alternative Education

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

**Course type:** Practice

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

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

**Course method:** present

**Number of ECTS credits:** 2

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 208

A	B	C	D	E	FX
64.9	30.77	1.44	0.96	0.48	1.44

**Provides:** PaedDr. Renáta Orosová, PhD., Mgr. Katarína Petriková, PhD.

**Date of last modification:** 25.03.2020

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
FZ1/10      **Course name:** Animal Physiology

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 7

**Recommended semester/trimester of the course:** 6.

**Course level:** I.

**Prerequisites:** ÚBEV/HIS1/15 or ÚBEV/HISE1/15

**Conditions for course completion:**

Written testing from practicals and oral examination

**Learning outcomes:**

To provide students with basic knowledge about physiological processes in organisms of animals and man.

**Brief outline of the course:**

The physiology of blood and hemopoietic organs. Physiology of respiration. Heart and circulatory physiology. Physiology of the gastrointestinal tract. The functions of liver. Energetic metabolism and physiology of nutrition. Water and mineral household of the organism. Physiology of the endocrine secretion. Physiology of reproduction. Physiology of excretion. General neurophysiology. Functions of neurons and neuronal networks. Sensory and motoric functions of CNS. Associative functions of CNS. Functions of the vegetative nervous system. Physiology of muscle contraction and active motion. Work physiology. Sensory physiology

**Recommended literature:**

Ganong, W. F.: Review of medical physiology. Prentice-Hall, Appleton & Langer, 1993  
Varder, A. J., Sherman, J. H., Luciano, D. S.: The mechanisms of body functions, McGraw-Hill, 1990  
Schmidt, R. F., Thews, G.: Human Physiology, Springer-Verlag, 1989  
R.W.Hill, R.Wyse, M.Anderson : Animal Physiology, Sinauer Assoc., 2008

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 1325

A	B	C	D	E	FX
7.92	15.25	21.81	24.68	24.0	6.34

**Provides:** doc. RNDr. Monika Kassayová, CSc., prof. RNDr. Beňadik Šmajda, CSc., doc. RNDr. Bianka Bojková, PhD., RNDr. Vlasta Demečková, PhD., RNDr. Terézia Kisková, PhD., RNDr. Natália Pipová, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚGE/ BKP/14	<b>Course name:</b> Bachelor Project
<b>Course type, scope and the method:</b>	
<b>Course type:</b>	
<b>Recommended course-load (hours):</b>	
<b>Per week:</b> Per study period:	
<b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 5.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b>	
Total number of assessed students: 84	
abs	n
96.43	3.57
<b>Provides:</b>	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.	

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
BKP/14      **Course name:** Bachelor Project

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

**Course type:**

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

**Per week:** Per study period:

**Course method:** present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:** 5.

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

Submission of the bachelor project, the defense of the project and acceptance of its content by the supervisor.

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

1. Scientific papers related to the topic of the bachelor project. 2. Directive No. 1/2011 of the rector UPJS in Košice.

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 90

abs	n
100.0	0.0

**Provides:**

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
BPO/14      **Course name:** Bachelor Thesis and its Defence

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

**Course type:**

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

**Per week:** Per study period:

**Course method:** present

**Number of ECTS credits:** 4

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 172

A	B	C	D	E	FX
50.58	26.16	16.86	4.65	1.74	0.0

**Provides:**

**Date of last modification:** 02.12.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚGE/ BPO/14	<b>Course name:</b> Bachelor Thesis and its Defence									
<b>Course type, scope and the method:</b>										
<b>Course type:</b>										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> Per study period:										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 4										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 114										
A	B	C	D	E	FX					
35.96	30.7	15.79	9.65	7.02	0.88					
<b>Provides:</b>										
<b>Date of last modification:</b> 31.07.2015										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚCHV/  
ZAC2/10      **Course name:** Basic Chemistry

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 6

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

inorganic part: one test in 6th week; 50 points.

organic part: one test in 12th week; 50 points.

At least 50% of points required from both.

Terminal examination by written form, 100 points; 50 points from inorganic part and 50 points from organic parts.

**Learning outcomes:**

The main goal of this subject is to provide a basic overview of inorganic and organic chemistry for biology students.

**Brief outline of the course:**

Introduction to general and inorganic chemistry. Periodic systems of elements. Atomic structure. Chemical bonds. Relationship between structure and properties of substances. Solutions. Transition and non transition elements and their compounds. Coordination and biocoordination compounds. Elements essential for living organisms and their function. Biometals. Biominerals.

Introduction to organic chemistry. Saturated and unsaturated hydrocarbons and their derivatives. Heterocyclic compounds. Carbohydrates. Lipids. Aminoacids and proteins. Enzyms and vitamins. Nucleic acids. Metabolism and energy.

**Recommended literature:**

1. Caret C. R., Denniston K.J., Topping J. J.: Principles and Applications of Inorganic, Organic and Biological Chemistry. WCB, Boston 1997.
2. R.Chang: Chemistry, McGRAW-HILL, Inc., New York 1991.
3. K. C. Timberlake: Organic and Biological Chemistry, Structure of Life. Benjamin Cummings Publishing Company, Inc., San Francisco 2002.

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 1097

A	B	C	D	E	FX
20.51	25.25	26.89	16.86	9.94	0.55

**Provides:** doc. RNDr. Zuzana Vargová, Ph.D., RNDr. Mária Vilková, PhD.**Date of last modification:** 03.05.2015**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚMV/ SMG/10	<b>Course name:</b> Basic statistics for geography				
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 1 / 2 <b>Per study period:</b> 14 / 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Project and tests during the semester. Given at the basis of partial examination and final test.					
<b>Learning outcomes:</b> To understand basics of descriptive and inferential statistics used in natural sciences.					
<b>Brief outline of the course:</b> Data types. Frequencies. Measures of central tendency, variability and concentration. Quantiles. Basic theoretical probability distributions. Point and interval estimation. Basic hypothesis tests. Correlation and regression analysis.					
<b>Recommended literature:</b> Wonnacott, Wonnacott: Introductory Statistics, Wiley 1977 Rogerson P.: Statistical methods for geography, SAGE Publications, London, 2001					
<b>Course language:</b> Slovak					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 440					
A	B	C	D	E	FX
4.32	8.41	17.73	31.14	30.68	7.73
<b>Provides:</b> RNDr. Daniel Klein, PhD.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.					

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
KAR/05

**Course name:** Basics of Karstology and Speleology

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

**Course type:** Practice

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

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

**Course method:** present

**Number of ECTS credits:** 2

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 222

A	B	C	D	E	FX
77.48	15.32	5.41	0.0	1.8	0.0

**Provides:** doc. RNDr. Zdenko Hochmuth, CSc., RNDr. Alena Gessert, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ BSB/15	<b>Course name:</b> Biology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b>										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> Per study period:										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 1										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 143										
A	B	C	D	E	FX					
22.38	21.68	26.57	18.18	11.19	0.0					
<b>Provides:</b>										
<b>Date of last modification:</b> 22.02.2016										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ BDD/05	<b>Course name:</b> Biology of Children and Adolescents									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture / Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 / 0 <b>Per study period:</b> 28 / 0										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 4., 6.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
Written test										
<b>Learning outcomes:</b>										
The aim of the subject is to gain the particular level of knowledge about human body and its development. It is necessary for the understanding of specific biological characteristics of children and adolescents linked to development.										
<b>Brief outline of the course:</b>										
Human ontogenesis. Postnatal development. Age specific features of skeletal and muscular, circulatory, respiratory, gastrointestinal and urinary systems. Reproductive system. Endocrine system. Nervous system. Age specifics of selected diseases and drug dependence arise. Human population and environment.										
<b>Recommended literature:</b>										
Drobný I., Drobná M.: Biológia dieťaťa pre špeciálnych pedagógov I. a II. Bratislava, PdF UK, 2000										
Lipková V.: Somatický a fyziologický vývoj dieťaťa. Osveta Bratislava, 1980										
Malá H., Klementa J.: Biológia detí a dorastu. Bratislava, SPN, 1989										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 1470										
A	B	C	D	E	FX					
31.56	23.33	17.41	17.55	9.59	0.54					
<b>Provides:</b> doc. RNDr. Monika Kassayová, CSc.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
BS1/03      **Course name:** Biostatistics

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 6

**Recommended semester/trimester of the course:** 3., 5.

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

Recognition.

Recognition.

**Learning outcomes:**

To provide the students with knowledge on basic principles of statistic methods used in biology and their scope of application

**Brief outline of the course:**

Sources and theoretical background of biostatistics. Basic principles of the probability theory. Descriptive statistics: variables, measures of mean value and variability of data. Theoretical and empirical distributions. Experimental sampling from normal distributions. Testing of hypotheses. One-way and multiple analysis of variance. Tests for multiple comparisons. Regression analysis. Correlations. Non-parametrical methods. Time series. Analysis of quantitative data.

**Recommended literature:**

Hassard, T. H.: Understanding biostatistics. Mosby Year Book, 1991

Snedecor, G.W., Cochran, W.G.: Statistical methods. The Iowa state university, Ames, 1972.

R.Forthofer, E.S.Lee, M.Hernandez: Biostatistics. Elsevier, Amsterdam..., 2007

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 199

A	B	C	D	E	FX
4.02	8.54	18.09	22.11	34.17	13.07

**Provides:** prof. RNDr. Beňadik Šmajda, CSc.

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
BO1/15      **Course name:** Botany I

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 4

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

Introduction to biology of lower plants.

**Brief outline of the course:**

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

Literature:

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

**Recommended literature:**

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

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

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

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

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 247

A	B	C	D	E	FX
24.7	18.22	24.7	17.81	12.15	2.43

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

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

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

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 5

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

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

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

Introduction to biology of lower plants.

**Brief outline of the course:**

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

Literature:

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

**Recommended literature:**

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

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

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

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

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 1700

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

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

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
BOT1/15      **Course name:** Botany II

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 4

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

**Course level:** I.

**Prerequisites:** ÚBEV/TCB1/03

**Conditions for course completion:**

Practical and theoretical exam.

**Learning outcomes:**

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

**Brief outline of the course:**

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

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

**Recommended literature:**

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

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

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

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

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 282

A	B	C	D	E	FX
14.54	15.25	25.89	21.63	14.54	8.16

**Provides:** prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčík, PhD.**Date of last modification:** 03.05.2015**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

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

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 5

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

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

**Prerequisites:**

**Conditions for course completion:**

Practical and theoretical exam.

**Learning outcomes:**

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

**Brief outline of the course:**

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

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

**Recommended literature:**

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

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

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

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

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 1453

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

**Provides:** prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčík, PhD.**Date of last modification:** 03.05.2015**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
KAG/15

**Course name:** Cartography and Geoinformatics

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 5

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

During the semester it is necessary to pass out the work outputs from the exercises. The knowledge gained on the exercises will be verified by continuous written examinations. The number of work outputs and written examinations will be announced at the beginning of the semester. It is possible to obtain 30% of the assessment criteria for the exercise (work outputs and written examinations). The resulting assessment from the exercise is based on the method fulfilled/not fulfilled. The final evaluation of the study subject is based on the combination of the evaluation conditions from the exercise and the final exam. The final exam may be enrolled by a student who has fulfilled the requirements for attending the exercises. The final assessment is the weighted average of the exercise assessment (30%) and the final exam (70%). Credits are awarded only to a student who achieves rating at least at the grade level of the grade E. Credits will not be awarded to a student who does not meet the requirements of the exercise and the exam is rated FX.

**Learning outcomes:**

The main learning outcomes include theoretical and practical skills in cartography and geoinformatics. Students understand cartographic and GIS terminology, students can apply cartographic approaches and methods using GIS, projections and define the content and composition of maps in GIS.

**Brief outline of the course:**

Cartography - the branch of science, position in the system of sciences, the history of cartography, topographic mapping in Slovakia; Cartographic projects, cartographic interpretation; Description maps, geographical names, cartographic generalization, State map series; Cartometry and morphometry; Mathematical cartography (reference area map projection and distortion).

Geoinformatics – the branch of science, elements of GIS, digital representation of landscape, raster and vector data, data collection and processing data for GIS, geospatial database, visualization and cartographic representation using GIS, applications of GIS.

**Recommended literature:**

HOFIERKA, J., J. KAŇUK, M. GALLAY, 2014. Geoinformatika. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach. ISBN 978-80-8152-178-2.

HOJOVEC, V. et al., 1987. Kartografie. Praha: Geodetický a kartografický podnik v Praze. ISBN 29-621-87.

LONGLEY, P.A., M. GOODCHILD, D. J. MAGUIRE, D. W. RHIND, 2010. Geographic Information Systems and Science. 3rd ed. Hoboken: Wiley & Sons, ISBN 978-0-470-72144-5.

PRAVDA, J., D. KUSEDOVÁ, 2004. Počítačová tvorba tematických máp. Bratislava: Univerzita Komenského v Bratislave. ISBN 80-223-2011-0.

ROBINSON, A. H. et al., 1995. Elements of Cartography. 6th ed. Hoboken: Wiley & Sons. ISBN 0-471-55579-7.

VOŽENÍLEK, V. et al., 2011. Metody tematické kartografie - Vizualizace prostorových jevů. Olomouc: Univerzita Palackého v Olomouci. ISBN 978-80-24427-90-4.

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 384

A	B	C	D	E	FX
11.98	21.88	20.83	20.31	19.79	5.21

**Provides:** doc. RNDr. Ján Kaňuk, PhD., prof. Ing. Vladimír Sedlák, PhD.

**Date of last modification:** 22.01.2018

**Approved:** prof. RNDr. Pavol Mártonfű, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> KOP/ OPaPDV/14	<b>Course name:</b> Civil Law and Intellectual Property Rights
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 4	
<b>Recommended semester/trimester of the course:</b> 3., 5.	
<b>Course level:</b> I., N	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 81	
abs	n
93.83	6.17
<b>Provides:</b> doc. JUDr. Renáta Bačárová, PhD., LL.M., prof. JUDr. Peter Vojčík, CSc.	
<b>Date of last modification:</b> 10.09.2018	
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.	

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

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

**Course name:** Communicative Competence in English

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

**Course type:** Practice

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

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

**Course method:** combined, present

**Number of ECTS credits:** 2

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

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

**Prerequisites:**

**Conditions for course completion:**

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

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

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

**Learning outcomes:**

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

**Brief outline of the course:**

Rodina, jej formy a problémy

Vyjadrovanie pocitov a dojmov

Dom, bývanie a budúcnosť

Formy a dialekty v anglickom jazyku

Život v meste a na vidieku

Kolokácie a idiomy, zaužívané slovné spojenia

Prázdny a sviatky vo svete

Životné prostredie a ekológia

Výnimky zo slovosledu

Frázové slovesá a ich použitie

Charakteristiky neformálneho diškurzu

**Recommended literature:**

www.bbclearningenglish.com

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

Misztal M.: Thematic Vocabulary. SPN, 1998.

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

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

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

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

**Course language:**

English language, B2 level according to CEFR

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

Total number of assessed students: 237

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

**Provides:** Mgr. Barbara Mitříková

**Date of last modification:** 11.02.2020

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** KGER/  
NJKK/07      **Course name:** Communicative Competence in German Language

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

**Course type:** Practice

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

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

**Course method:** present

**Number of ECTS credits:** 2

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

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

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 44

A	B	C	D	E	FX
59.09	13.64	6.82	4.55	13.64	2.27

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

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** KGER/  
NJKG/07      **Course name:** Communicative Grammar in German Language

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

**Course type:** Practice

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

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

**Course method:** present

**Number of ECTS credits:** 2

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

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

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 50

A	B	C	D	E	FX
56.0	12.0	10.0	4.0	10.0	8.0

**Provides:** PaedDr. Ingrid Puchalová, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
PMZ/10      **Course name:** Comparative Animal Morphology

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

**Course type:** Lecture / Practice

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

**Per week:** 2 / 1 **Per study period:** 28 / 14

**Course method:** present

**Number of ECTS credits:** 4

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

Lectures and practical exercises, original drawing of some parts of animal body or its derivates, examination.

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

Kardong, K. V., 2002: Vertebrates. Comparative anatomy, function, evolution. 3rd ed., Mc-Graw-Hill, New York.

Pough, F. H., Janis, Ch. M., Heiser, J. B., 2008: Vertebrate Life. Prentice Hall, Inc., 752 pp. 8th edition.

Ruppert, E. E., Fox, R. S., & Barnes, R. D., 2004: Invertebrate zoology: a functional evolutionary approach. Belmont, CA: Thomas-Brooks/Cole.

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 1895

A	B	C	D	E	FX
16.57	18.36	25.01	22.32	12.61	5.12

**Provides:** RNDr. Andrej Mock, PhD., RNDr. Alexander Csanády, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚGE/ KRS/08	<b>Course name:</b> Complex geographic characteristics of selected world regions
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 3	
<b>Recommended semester/trimester of the course:</b> 6.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> At the beginning of the semester, students choose a region from provided list. During the semester, they elaborate presentation reflecting formal and content requirements explained by teacher at the beginning of the semester. This part constitute 50% of total evaluation. Another 10% represents the activity at the seminars. Remaining 40 % of evaluation is represented by written verification of acquired knowledge. Evaluation of all - the presentation, activity and written verification must reach at least 50% to complete the course. To get an A grade, it is necessary to obtain at least 90% of weighted average. 80% to grade B, 70% to C, 60% to D, and at least 50% to grade E.	
<b>Learning outcomes:</b> Understanding of causal relations between individual geographic phenomena in spatial and temporal context of individual regions; extended knowledge about selected regions.	
<b>Brief outline of the course:</b> Geographic location, geologic history and structure, orography and shapes of coast, climate, hydrology, soils and biogeography, protection of nature, current landscape and its transformation, historical and political development, population and sites, economy and integration groupings in selected regions of the world.	
<b>Recommended literature:</b> DE BLIJ, H. J. et al: 2013: The World Today - Concepts and Regions in Geography, 6th edition. New York (Wiley), 528 p. HOBBS, J. J. 2010: Fundaments of World Regional Geography, 2nd edition. Belmont (Brooks/Cole), 438 p. WEIGHTMAN, B. 2010: Dragons and Tigers – A Geography of South, East and Southeast Asia, 3rd edition. Hoboken (Wiley), 523 p. BAAR, V. 2002: Národy na prahu 21. století. Emancipace nebo nacionalismus? Ostrava (Ostravská univerzita), 416 s. BRADSHAW, W. et al. 2012: Contemporary World Regional Geography, 4th edition. New York (McGrawHill), 620 p.	
<b>Course language:</b> Slovak and English	

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

Total number of assessed students: 485

A	B	C	D	E	FX
27.84	36.08	22.47	8.25	4.74	0.62

**Provides:** Mgr. Ladislav Novotný, PhD.**Date of last modification:** 01.04.2020**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ CYT1/15	<b>Course name:</b> Cytology									
<b>Course type, scope and the method:</b>										
Course type: Lecture / Practice										
<b>Recommended course-load (hours):</b>										
Per week: 3 / 2 Per study period: 42 / 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 6										
<b>Recommended semester/trimester of the course:</b> 1.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
Practicals graduation (without absence); Two written tests graduation (min. 70 % fruitfulness of each); Oral examination										
<b>Learning outcomes:</b>										
To provide the students with knowledge of basic principles of cell microscopic and submicroscopic structure and function.										
<b>Brief outline of the course:</b>										
Levels of living system organization. Characteristics and comparison of prokaryotic and eukaryotic plant and animal cells. Microscopic, submicroscopic and molecular structure and function of individual cell components. Nucleus and cell division.										
<b>Recommended literature:</b>										
Alberts, B.: Molecular Biology of the Cell. Garland Science, 2014										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 678										
A	B	C	D	E	FX					
7.37	18.88	34.96	21.98	16.08	0.74					
<b>Provides:</b> RNDr. Rastislav Jendželovský, PhD.										
<b>Date of last modification:</b> 29.01.2020										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/PUDB/15	<b>Course name:</b> Drug Addiction Prevention in University Students									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 3., 5.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 318										
A	B	C	D	E	FX					
78.62	17.92	2.52	0.94	0.0	0.0					
<b>Provides:</b> Mgr. Marianna Berinšterová, PhD., prof. PhDr. Ol'ga Orosová, CSc.										
<b>Date of last modification:</b> 06.09.2018										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚINF/  
EDS/15      **Course name:** Educational software

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

**Course type:** Lecture / Practice

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

**Per week:** 0 / 2 **Per study period:** 0 / 28

**Course method:** present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:** 5.

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

1 Preparation of interim assignments:

- a) Worksheet for student (with custom graphics)
- b) Multimedia educational presentation (with pictures, animations and sounds)
- c) Interactive educational quiz (with several types of quiz items)
- d) Methodological guidance on the use of interactive applications in teaching selected topic of chosen school subject.

2 Creation and presentation of final project on the use of educational software in education.

**Learning outcomes:**

1. To acquire an overview of the educational software types and its exploitation in education.

2. To gain or enhance basic skills in working with:

- a) presentation software, programs for creation and editing images, animations, diagrams, sounds, concept maps,
- b) programs for creation of quizzes, questionnaires, voting,
- c) simulation and modeling software,
- d) selected subject-oriented educational programs,

3. To create and present a final project on the use of educational software in education.

**Brief outline of the course:**

Educational software types. Onlilne educational sources and tools. Multimedia processing. Tools for creation of teaching aids.

**Recommended literature:**

1. Digitálna gramotnosť učiteľa : učebný materiál- modul 1 / Rastislav Adámek ... [et al.]. - Košice : Ústav informácií a prognóz školstva, 2009. - 80 s. - ISBN 9788080861193(brož.).
2. Moderná didaktická technika v práci učiteľa : učebný materiál modul 2 / Rastislav Adámek ... [et al.] ; recenzenti Viliam Fedák, Anton Lavrin. - Košice : Elfa, 2010. - 200 s. - ISBN 9788080861353 (brož.).
3. Web, Multimédiá / Martin Homola ... [et al.]. - Bratislava : Štátny pedagogický ústav, 2010. - 68 s. - Č. projektu: ŠPVV ĎVUi 26120130001. - ISBN 9788081180514 (brož.).

**Course language:**

**Notes:**

Content of lessons will be flexibly adapted to the field of study of learners. Language learners will be able to work more with pictures and sounds, physicists with simulation programs, mathematicians with mathematical software, etc.

**Course assessment**

Total number of assessed students: 43

A	B	C	D	E	FX
58.14	23.26	16.28	0.0	2.33	0.0

**Provides:** doc. RNDr. Ľubomír Šnajder, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> CJP/ PFAJ4/07	<b>Course name:</b> English Language of Natural Science
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Active participation in class and completed homework assignments. Students are allowed to miss 2 classes at the most. Continuous assessment: 2 credit tests (presumably in weeks 6 and 13) and academic presentation in English. In order to be admitted to the final exam, a student has to score at least 65 % as a sum of both credit tests. The exam test results represent 50% of the final grade for the course, continuous assessment results represent the other 50% of the final grade. The final grade for the course will be calculated as follows: A 93-100, B 86-92, C 79-85, D 72-78, E 65-71, FX 64 and less.	
<b>Learning outcomes:</b> Enhancement of students' language skills (speaking, writing, reading and listening comprehension) in English for specific purposes and development of students' language competence (familiarization with selected phonological, lexical and syntactic phenomena), improvement of students' pragmatic competence (familiarization with selected language functions) and improvement of presentation skills at B2 level (CEFR) with focus on terminology of English for natural science.	
<b>Brief outline of the course:</b> <b>ANGLICKÝ JAZYK PRE GEOGRAFOV:</b> Veda a výskum. Odbor geografia. Planéta Zem. Naša slnečná sústava. Zemetrasenia, Sopečná činnosť. Svetové oceány a ľadovce. Životné prostredie a geografia. Počasie a klíma. <b>ANGLICKÝ JAZYK PRE EKOLÓGOV:</b> Veda a výskum. Odbor ekológia. Životné prostredie. Znečistenie a dôsledky. Sopečná činnosť, zemetrasenia. Great Pacific Garbage Patch.	

Globálne otepľovanie a dôsledky. Ľadovce.

Počasie a klíma. Búrky, hurikány, tsunami.

Život na Zemi. Ohrozené rastlinné a živočíšne druhy.

**ANGLICKÝ JAZYK PRE BIOLÓGOV:**

veda a výskum, odbor biológia.

morfológia rastlín, koreň.

stonka, list.

rozmnožovanie rastlín, kvet.

biológia človeka - telesné sústavy.

slovná zásoba z oblasti botanickej a zoologickej nomenklatúry.

**ANGLICKÝ JAZYK PRE MATEMATIKOV:**

Veda a výskum, odbor matematika.

čísla a tvary v matematike.

Elementárna algebra.

Elementárna geometria.

Výpočty v matematike.

Pytagoras, Pythagorova veta.

Grafy a diagramy.

Štatistika.

**ANGLICKÝ JAZYK PRE FYZIKOV**

Veda a výskum, odbor fyzika.

Atómy a molekuly.

Hmota a jej premeny.

Elektrina, jej využitie.

Zvuk, jeho prenos.

Svetlo.

Solárny systém.

Matematické operácie.

**ANGLICKÝ JAZYK PRE CHEMIKOV:**

Veda a výskum, odbor chémia.

História, Každodenná chémia.

Laboratórium a jeho vybavenie.

Periodická tabuľka.

Hmota a jej premeny.

Životné prostredie a chémia.

**ANGLICKÝ JAZYK PRE INFORMATIKOV:**

Veda a výskum, informatika.

Život s počítačom.

Typický PC.

Zdravie a bezpečnosť, ergonomika.

Programovanie.

Emailovanie.

Cybercrime.

Trendy budúcnosti.

#### **Recommended literature:**

study materials provided by the course instructor

Redman, S.: English Vocabulary in Use, Pre-intermediate, Intermediate. Cambridge University Press, 2003.

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

Wharton J.: Academic Encounters. The Natural World. CUP, 2009.  
Murphy, R.: English Grammar in Use. Cambridge University Press, 1994.  
P. Fitzgerald : English for ICT studies. Garnet Publishing, 2011.  
<https://worldservice/learningenglish>, <https://spectator.sme.sk>  
[www.isllibrary.com](http://www.isllibrary.com)

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 2582

A	B	C	D	E	FX
36.91	25.17	17.04	10.3	8.37	2.21

**Provides:** PaedDr. Gabriela Bednáriková, Mgr. Zuzana Naďová, Mgr. Ol'ga Lešková, PhDr. Marianna Škultétyová

**Date of last modification:** 08.02.2020

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
TCZ/03      **Course name:** Fieldwork from zoology

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

**Course type:** Practice

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

**Per week:** Per study period: 5d

**Course method:** present

**Number of ECTS credits:** 2

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

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

**Prerequisites:**

**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, birds and mammals - observation, and laboratory work.

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 793

abs	n
99.24	0.76

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

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚGE/ HYP/15	<b>Course name:</b> Fieldwork in Hydrology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
Per week: 2 Per study period: 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 3										
<b>Recommended semester/trimester of the course:</b> 4.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 64										
A	B	C	D	E	FX					
98.44	1.56	0.0	0.0	0.0	0.0					
<b>Provides:</b> RNDr. Dušan Barabas, CSc.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
GEP2/13

**Course name:** Fundamentals of Geology for Geographers

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 7

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

Courses have following objectives: firstly, to introduce the current theories of processes which occur in the Earth (global tectonics, species of magmatism), secondly, to describe the rock-forming minerals, taxonomy of intrusive rocks, taxonomy of sedimentary rocks and rocks which had overcame metamorphosis, basics of the regional geology of Slovakia, basics of the historical geology and paleontology.

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 948

A	B	C	D	E	FX
7.38	15.08	32.07	28.06	11.92	5.49

**Provides:** doc. RNDr. Zdenko Hochmuth, CSc., Ing. Katarína Bónová, PhD., Mgr. Veronika Straková

**Date of last modification:** 08.09.2016

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ VB1/01	<b>Course name:</b> General botany				
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 2 <b>Per study period:</b> 42 / 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 2.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚBEV/CYT1/15					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b> This subject enables to understand the structure and function of plant cells, tissues and organs and to enhance student's ability to describe the biological role of plants for life on earth.					
<b>Brief outline of the course:</b> The structure and function of plant cells and tissues. Plant organs, their structure, function, shape and organization. Plant reproduction and grounding in embryology. Basic information and terms that are necessary for understanding of relationship between internal structure and functions of organs and functions plant organism en bloc.					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 884					
A	B	C	D	E	FX
17.76	27.6	28.17	15.95	7.81	2.71
<b>Provides:</b> prof. RNDr. Pavol Mártonfi, PhD., Mgr. Vladislav Kolarčík, PhD.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.					

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
GE1/10      **Course name:** Genetics

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 7

**Recommended semester/trimester of the course:** 5.

**Course level:** I.

**Prerequisites:** ÚBEV/MB1/01 or ÚBEV/MOB1/03 or ÚBEV/MOB1/15

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 1355

A	B	C	D	E	FX
19.19	15.94	15.94	13.95	18.82	16.16

**Provides:** prof. RNDr. Eva Čellárová, DrSc., RNDr. Miroslav Soták, PhD., RNDr. Katarína Bruňáková, PhD., RNDr. Miroslava Bálintová, RNDr. Zuzana Jurčáková, RNDr. Odetta Czeranková, PhD., RNDr. Jana Henzelyová, PhD., RNDr. Diana Kopcsayová

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚGE/ GEE2/07	<b>Course name:</b> Geoecology									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b> Focus will be put on the development of this discipline, different dimensions of the physical – geographic complexes, regularities of the space differentiation of the physical – geographic sphere, evolution, and dynamics of the physical – geographic complexes. Synthesis of the principles of landscape and landscape-ecological planning.										
<b>Recommended literature:</b> BEDRNA, Z., a kol. 1992: Analýza a čiastkové syntézy zložiek krajinnej štruktúry. Bratislava. Učebné texty, 95 s.. MIČIAN, Ľ., ZATKALÍK, F. 1984: Náuka o krajine a starostlivosť o životné prostredie. UK Bratislava skriptá, 137s. MIČIAN, Ľ. 1989: Pokus o novú definíciu krajinnej ekológie. Ekológia (ČSFR), 3,1, Veda, Bratislava, s. 7-12. MIČIAN, Ľ. 2008: Všeobecná geoekológia. Bratislava: Geo-grafika, 88 s. – Skriptá.										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 659										
A	B	C	D	E	FX					
5.01	12.59	20.33	24.28	35.51	2.28					
<b>Provides:</b> doc. RNDr. Zdenko Hochmuth, CSc., RNDr. Dušan Barabas, CSc., Mgr. Veronika Straková										
<b>Date of last modification:</b> 16.09.2017										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
GIS/15      **Course name:** Geographic Information Systems

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 6

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

The assessment is a combination of continual control during the practicals and the final exam in the examination period. The continual assessment is performed during the semester and it involves 1 written test in the mid-term of the semester and a project report generated according to the assignment and practical skills acquired during the practicals. The student can go for the final exam in case he or she acquired at least the E mark in the continual assessment. The final assessment mark is the result of the average of the marks received in the mid-term test, project report and final exam. The final exam is a written test. The credits are given in case the student had reached at least the E mark in continual assessment and final exam. The following marking scheme is applied in the assessment: A (100-90 points), B (80-89 points), C (70-79 points), D (60-69 points), E (50-59 points), FX (0-49 points).

**Learning outcomes:**

The student will understand the basics of the theory of geoinformation science, GIS, and Remote Sensing. The student will be able perform tasks in a GIS software, generate thematic maps and conduct basic spatial analyses such as spatial queries, attribute queries, terrain modelling, editing custom geodata, importing geodata.

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

Slovak or Czech or English

**Notes:**

**Course assessment**

Total number of assessed students: 330

A	B	C	D	E	FX
30.0	24.55	25.45	13.33	6.67	0.0

**Provides:** prof. Mgr. Jaroslav Hofierka, PhD., doc. Mgr. Michal Gallay, PhD.

**Date of last modification:** 16.09.2017

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚGE/ GEOM/15	<b>Course name:</b> Geography									
<b>Course type, scope and the method:</b>										
<b>Course type:</b>										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> Per study period:										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 1										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 120										
A	B	C	D	E	FX					
16.67	20.0	25.83	16.67	20.0	0.83					
<b>Provides:</b>										
<b>Date of last modification:</b> 26.02.2016										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚGE/ GVS/15	<b>Course name:</b> Geography of Public Administration									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 3										
<b>Recommended semester/trimester of the course:</b> 5.										
<b>Course level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b> active participation, works during semester, final test. The student is awarded a grade provided they attend the classes regularly, submit and present the seminar work and write a final test with a value 50 % at least - grade E.										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b> public administration (PA), system of PA in Slovakia and models of public administration, history of public administration on the territory of Slovakia, division of PA - state government, self-government - local and regional, financial aspects of local self-government units, intermunicipal cooperation - microregions, common communal authorities, local action group, local government reform - Slovakia and other European countries, the multilevel city self-government - the city of Košice, regional self-government, territorial-administrative division, system of public administration in model European states.										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 228										
A	B	C	D	E	FX					
22.81	33.33	19.74	14.91	8.77	0.44					
<b>Provides:</b> prof. RNDr. Peter Spišiak, CSc., RNDr. Stela Csachová, PhD.										
<b>Date of last modification:</b> 06.08.2018										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
MG/14

**Course name:** Geography of mining

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

**Course type:** Lecture

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

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

**Course method:** present

**Number of ECTS credits:** 3

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

The evaluation is based on a combination of continuous and final control. The continuous control is carried out during the teaching part by written test with a share of 30 % of the final evaluation. The final control is written and constitutes 70 % of the final evaluation. The resulting evaluation is a weighted average of the continuous (30 %) and final (70 %) controls. Credits will be awarded only to student who achieves the evaluation at the minimum level of the mark E in every part of the evaluation.

**Learning outcomes:**

To acquaint students with basic facts and knowledge of the history of mining science from the view of geographic aspect to obtain information overview of the history of world and Slovak mining for geographic purposes.

**Brief outline of the course:**

Historical foundations of the global mining industry, mining oldest written records of mining heyday in the Middle Ages, the first mining maps, Slovak ore mining in the Austro-Hungarian Empire, First World Mining Academy in Banská Štiavnica mining and migration of the population, the world "gold rush", salt roads Europe, coal mining and electrification of industry, environmental consequences of mining devastation, mining open-air museums in Slovakia and Europe and their importance for the promotion of tourism.

**Recommended literature:**

Odporúčaná literatúra:

Ježek, B. a Hummel, J., 2006: Georgius Agricola, Dvanásť kníh o baníctve a hutníctve.

Preklad z českého originálu: Petr, K. a Petrová, M., Ostrava: Montanex a.s., 2006, 546s., ISBN 80-7225-218-6.

Puzder, J., 2000: Samuel Mikovíni, život a dielo. Košice: FBERG TU Košice, 115s.

Vozár, J., 2000: Zlatá kniha baníctva. Košice: Tibor Turčan/Banská agentúra, 2000, 263s., ISBN 80-968421-4-5.

Vozár, J., 2002: Kódex mestského a banského práva Banskej Štiavnice. Košice: Tibor Turčan/Banská agentúra, 2002, 71s., ISBN 80-968621-2-X.

Zícha, Z., 2005: Back to the past. The history of technology and manpower in the mining is a legacy which cannot be forgotten. Ústí nad Labem: CDL Design s.r.o., 2005, 98p., ISBN 80-902278-9-9.

**Course language:**

Slovak

**Notes:**

without notices

**Course assessment**

Total number of assessed students: 60

A	B	C	D	E	FX
55.0	33.33	5.0	5.0	1.67	0.0

**Provides:** prof. Ing. Vladimír Sedláč, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
OBY2/03

**Course name:** Geography of population and settlements

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

**Course type:** Lecture / Practice

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

**Per week:** 2 / 1 **Per study period:** 28 / 14

**Course method:** present

**Number of ECTS credits:** 4

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

Evaluation of student performance is carried out by combining ongoing review during the term of examination for the period of the semester. Continuous control consists of min. 80 % of the active participation of students in teaching and successfully solving assignments. If a student does not reach required active participation of teaching and successfully does not solve the given problem can not log on to the test.

**Learning outcomes:**

The student will acquire theoretical and methodological basis of Geography of Population and Settlements. Students will acquire a basic spatial differentiation of population and settlements in the world according to basic characteristics.

**Brief outline of the course:**

Population geography as a science discipline; Trends and forecasts of the world population; Distribution of population; Natural and mechanical movement of population (natality, mortality, balance natural movement of the population, model of demographic cycle, population migration); Population structure on the basis of biological, cultural and economic characteristics; Geography settlements as a scientific discipline; Settlement development and settlement systems; Geographical location of settlements; The structure of settlements by size, dynamics and morphology; Urban geography (definition of city, creation of city and functions cities); The hierarchy of settlements and Gravity; Urbanization (basic concepts, indicators, aspects and methods of research); Rural settlement systems (compact and scattered rural settlements and their geographical interpretation).

Seminars

Seminars during the semester are oriented to problem solving in order to practice, resp. demonstrate phenomena studied in different regional units of Slovakia, Europe or Worldwide.

**Recommended literature:**

BAČÍK, M. 2015: Základy demogeografie. VERBUM – vydavateľstvo KU Ružomberok. 230 s.

BAŠOVSKÝ, O., MLÁDEK, J. 1989: Geografia obyvateľstva a sídel. Prírodovedecká fakulta UK, Bratislava, 221s.

BLEHA, B., VAŇO, B., BAČÍK, V. (ed) 2014: Demografický atlas Slovenskej Republiky.

Prírodovedecká fakulta UK Bratislava a Inštitút informatiky a štatistiky. Geografika, 163 s.

- BLEHA, B., NOVÁKOVÁ, G. 2010: Praktikum demogeografie a demografie 1. Geografika, Bratislava, 138s.
- HALÁS, M., BRYCHTOVÁ, Š., FŇUKAL, M. 2013: Základy humánní geografie 1: Geografie obyvatelstva a sídel. Univerzita Palackého v Olomovci, Přír. F. 101s. Online verzia: <http://distgeo.upol.cz/uploads/vyuka/skripta-halas-akol-1.pdf>
- MLÁDEK, J. 1992: Základy geografie obyvateľstva. SPN Bratislava, 230s.
- MLÁDEK, J. a kol. 2006: Atlas obyvateľstva Slovenska. UK Bratislava, 168s.
- MLÁDEK, J., KUSENDOVÁ, D., MARENČÁKOVÁ, J., PODOLÁK, P., VAŇO, B. 2006: Demogeografická analýza Slovenska. UK Bratislava, 222s.
- ROUBÍČEK, V. 1997: Úvod do demografie. CODEX Bohemia. 352s.
- SHORT, J. R. 1994: Lidská sídla. Veľká geografická encyklopédia sveta. Nakladatelský dóm OP Praha
- TOUŠEK, V., KUNC, J., VYSTOUPIL, J. a kol. 2008: Ekonomická a sociální geografie. Plzeň: Aleš Čeněk, 2008. 411 s.

**Course language:**

Slovak

**Notes:**

**Course assessment**

Total number of assessed students: 656

A	B	C	D	E	FX
8.84	14.79	22.26	24.09	26.68	3.35

**Provides:** prof. RNDr. Peter Spišiak, CSc., RNDr. Janetta Nestorová-Dická, PhD.

**Date of last modification:** 16.09.2019

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚGE/ GEX1/07	<b>Course name:</b> Geological excursion				
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 3d <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 2.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b> Visiting of different localities in the Western Carpathian tectonic units - Flysh belt, Klippen belt, Central Western Carpathians. Visiting of several localities of mining in Slovakia and getting to know the process of manufacturing of the rocks.					
<b>Recommended literature:</b> Regionálne geologické mapy Slovenska (1:50 000) + Vysvetlivky. ŽEC, B. et al., 2005: Exkurzný sprievodca ku kongresu Slovenskej geologickej spoločnosti Zemplínska šírava - Medvedia hora. CompuGraph, Košice, 138s. BIELY, A. et al., 1996: Geologická mapa Slovenska, 1 : 500 000. MŽP SR, ŠGÚDŠ, Bratislava. MIŠÍK, M., 1976: Geologické exkurzie po Slovensku. SPN Bratislava, 276 s. NĚMEC, F., 1987: Klúč na určovanie nerastov a hornín. SPN Bratislava, 240 s. PELLANT, CH., PELLANTOVÁ, H., 1994: Horniny a minerály. Osveta, Martin, 256 s.					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 405					
A	B	C	D	E	FX
79.26	15.56	3.21	0.0	0.0	1.98
<b>Provides:</b> doc. RNDr. Zdenko Hochmuth, CSc., Ing. Katarína Bónová, PhD.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚGE/ GEM2/05	<b>Course name:</b> Geomorphology									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 2 <b>Per study period:</b> 42 / 28 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 7										
<b>Recommended semester/trimester of the course:</b> 2.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 1126										
A	B	C	D	E	FX					
8.97	21.05	20.78	16.7	21.76	10.75					
<b>Provides:</b> doc. RNDr. Zdenko Hochmuth, CSc., RNDr. Alena Gessert, PhD.										
<b>Date of last modification:</b> 20.09.2016										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚGE/ NGS/06	<b>Course name:</b> German geographical seminar
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 3.	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> On the basis of part-time works, 5 in total (á 20 points), the student will receive the end evaluation of the subject. For each work he should acquire minimal 11 points, so 55 points in total.	
<b>Learning outcomes:</b> After the subject attendance the student should be able to communicate with professional german terminology in writing and oral presentation.	
<b>Brief outline of the course:</b> The academic geographical terminology on particular topics of physical and human geography will be concerned. The world professionals of geography in the past and present. The system of university studies in Germany, German geographical periodicals, monographs. Geography of Germany.	
<b>Recommended literature:</b> BAUER, J., ENGLERT, W., MEIER, U., MORGENEYER, F., WALDECK, W., 2002: Physische Geographie kompakt. Spektrum Akademischer Verlag Heidelberg. 192 s. HOLLERBACH, E., NESS, N., 2002: Rhein- von Mainz bis Koeln. Rahmel - VerlagGmbH, Pulheim. 96 s. KOLEKTIV, 2004: Deutschland. Verlag Karl Baedeker Ostfildern. 1182 s. KUBALLA, S., 2001: Unbekanntes Deutschland. ADAC Verlag GmbH Munchen. 432 s. STRAHLER, H.A., STRAHLER, N.A., 1999: Physische Geographie. Verlag Eugen Ulmer Stuttgart. 294 s. ZEPP, H., MÜLLER, M.J., 1999: Landschaftsökologie Erfassungsstandards. Flensburg. 312 s.	
<b>Course language:</b> slovak, german	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 14

A	B	C	D	E	FX
64.29	21.43	0.0	0.0	7.14	7.14

**Provides:** RNDr. Alena Gessert, PhD.**Date of last modification:** 03.05.2015**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚGE/ GNG/15	<b>Course name:</b> Graphic tools in geography
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 3	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> During the semester, students will need to hand in the outputs of the practicals. The resulting assessment is based on the final practical skills verification and delivery of the outputs of practicals. From the practical skills verification, students must obtain at least 90 points to get the A mark, at least 80 points to get B, at least 70 points to get C, at least 60 points to get D, at least 50 points to get E. The credits shall not be granted to a student who does not hand in one or more outputs of the practicals or he/she will get less than 50 points out of 100.	
<b>Learning outcomes:</b> The main learning outcomes include practical skills mainly in software COREL Graphics Suite focusing on proces vector and raster data to produce and edite map layouts, pictures using in geographfical research and teaching geography.	
<b>Brief outline of the course:</b> Introduction to the exercises, criteria of assessment, recommended literature, explanation of the main principle of vector and raster graphics, graphic formats (JPG, TIF, BMP, PNG), adjustment of the image size. Raster graphics: joining of maps into a single unit. Raster graphics: drawing, text editing. Image Adjustment for publication, fill in missing picture elements, working with a mask, retouch. Vector graphics: manual vectorization of raster background (selected municipalities map of the district), curves and areas, tools Bezier tool, functions, Weld, Trim. Vector graphics: cartogram creation of cartodiagrams and graphical scale for the selected district, tools Basic shapes, Bezier tool, Align. Vector graphics: vector formats, edit existing vector background, creating cartograms. Vector graphics: manual vectorization of raster surface (topographic map with contour lines), zhladzovanie curves show qualitative phenomena.	
<b>Recommended literature:</b> KADAVÝ, D., PÍRKOVÁ, K. 2008: CorelDRAW X4: Podrobná uživatelská příručka. Praha (Computer Press). CORELDRAWTIPS 2013: Corel Draw Tips. <a href="http://coreldrawtips.com/site/coreldraw-tutorials">http://coreldrawtips.com/site/coreldraw-tutorials</a> COREL 2013: CorelDRAW Graphics Suite Tutorials: <a href="http://www.corel.com/corel/pages/index.jsp?pgid=800382&amp;storeKey=ca&amp;languageCode=en">http://www.corel.com/corel/pages/index.jsp?pgid=800382&amp;storeKey=ca&amp;languageCode=en</a>	
<b>Course language:</b>	

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

Total number of assessed students: 197

A	B	C	D	E	FX
64.97	17.26	12.69	3.55	1.52	0.0

**Provides:** doc. Mgr. Michal Gallay, PhD., doc. RNDr. Ján Kaňuk, PhD., Mgr. Ján Šašak, Mgr. Jozef Šupinský**Date of last modification:** 03.05.2015**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ HISE1/15	<b>Course name:</b> Histology				
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 2 <b>Per study period:</b> 42 / 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 2.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚBEV/CYT1/15					
<b>Conditions for course completion:</b> Oral examination					
<b>Learning outcomes:</b> To provide the students with knowledge of basic morphology of tissues of animals.					
<b>Brief outline of the course:</b> Epithelium and glands. Connective tissue. Cartilage. Bone. Muscle. Nervous Tissue. Blood and hemopoiesis. Circulatory system. Lymphoid system. Endocrine system. Integument. Respiratory system. Digestive system. Urinary system. Female reproductive system. Male reproductive system. Nervous system. Special senses.					
<b>Recommended literature:</b> Gartner, L.P., Hiatt, J.L.: Color Texbook of Histology. W.B. Saunders Company, Philadelphia, 1997 Juanqueira, L.C., Carneiro, J., Kelley, R.O.: Basic Histology. Prentice Hall International Inc., Apleton & Lange, 1992 Michel H. Ross, Wojciech Pawlina: Histology, Lippincott Williams & Wilkins, 2011					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 402					
A	B	C	D	E	FX
12.69	15.17	15.67	19.4	22.39	14.68
<b>Provides:</b> doc. RNDr. Zuzana Daxnerová, CSc., RNDr. Juraj Ševc, PhD., RNDr. Anna Alexovič Matiašová, PhD.					
<b>Date of last modification:</b> 01.03.2019					
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.					

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** KFaDF/  
DF2p/03      **Course name:** History of Philosophy 2 (General Introduction)

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

**Course type:** Lecture / Practice

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

**Per week:** 2 / 1 **Per study period:** 28 / 14

**Course method:** present

**Number of ECTS credits:** 4

**Recommended semester/trimester of the course:** 6.

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

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 739

A	B	C	D	E	FX
60.89	13.8	12.58	8.66	3.38	0.68

**Provides:** doc. PhDr. Pavol Tholt, PhD., mim. prof., Doc. PhDr. Peter Nezník, CSc., PhDr. Katarína Mayerová, PhD., doc. Mgr. Róbert Stojka, PhD.

**Date of last modification:** 25.03.2020

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ ACL/03	<b>Course name:</b> Human Anatomy									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture / Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b> 3.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
Written examination										
<b>Learning outcomes:</b>										
Anatomic systems of man.										
<b>Brief outline of the course:</b>										
Anatomic terminology, skeleton and muscles, gastrointestinal system, respiratory system, circulatory and lymphatic system, urogenital system, sensory organs, nervous system, ontogenesis of man.										
<b>Recommended literature:</b>										
Kahle, W., Leonhardt, H., Platzer, W. : Color Atlas and Textbook of Human Anatomy in 3 Volumes : Volume 1 : Locomotor System, Volume 2: Internal Organs and Volume 3: Nervous System and Sensory Organs Thieme Medical Publishers, Inc. New York, 1993 Anne M. R. Agur : Grant's atlas of anatomy. Williams et Wilkins, USA, 1991										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 1727										
A	B	C	D	E	FX					
4.75	16.39	27.45	25.54	22.7	3.18					
<b>Provides:</b> RNDr. Juraj Ševc, PhD., Dott. Andrea Halaburková, PhD., RNDr. Anna Alexovič Matiašová, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
EXHG1/15

**Course name:** Human Geography Excursion

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

**Course type:** Practice

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

**Per week:** Per study period: 6d

**Course method:** present

**Number of ECTS credits:** 3

**Recommended semester/trimester of the course:** 5.

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 705

A	B	C	D	E	FX
81.13	9.79	6.52	0.99	0.85	0.71

**Provides:** prof. RNDr. Peter Spišiak, CSc., RNDr. Stela Csachová, PhD., Mgr. Marián Kulla, PhD., Mgr. Ladislav Novotný, PhD., RNDr. Janetta Nestorová-Dická, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
HGS/15

**Course name:** Human Geography of Slovakia

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

**Course type:** Lecture / Practice

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

**Per week:** 3 / 1 **Per study period:** 42 / 14

**Course method:** present

**Number of ECTS credits:** 5

**Recommended semester/trimester of the course:** 6.

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 462

A	B	C	D	E	FX
3.68	10.17	18.83	35.93	26.84	4.55

**Provides:** prof. RNDr. Peter Spišiak, CSc., Mgr. Marián Kulla, PhD., RNDr. Janetta Nestorová-Dická, PhD.

**Date of last modification:** 31.03.2020

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚGE/ HUGN/15	<b>Course name:</b> Human geography (Non-production Systems)				
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 3					
<b>Recommended semester/trimester of the course:</b> 5.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b> BOROVSKÝ, J. a kol., 2008: Cestovný ruch, trendy a perspektívy. Iura Edition, 280 s. GOELDNER, CH.R., BRENT RICHIE, J.R., 2014: Cestovní ruch - principy, příklady, trendy. Biz books, 545 s. HALÁS, M., 2000: Zahraničný obchod SR s ČR. Geographical Studies 7, Constantine the Philosopher University Nitra, s. 98-107. HALL, C.M. - PAGE, S.J. 2002: The geography of tourism and recreation, 2. edition, London and New York, 399 p. HAVRLANT, J., 2007: Geografie cestovního ruchu I. Základy geografie cestovního ruchu, Ostravská univerzita, 41 s. MARIOT, P., 1983: Geografia cestovného ruchu. Veda, Bratislava, 224 s. OTRUBOVÁ, E., 2003: Humánna geografia II (Geografia zahraničného obchodu, Geografia cestovného ruchu). Prírodovedecká fakulta UPJŠ, Košice, 105 s. ŠTEPÁNEK, KOPAČKA, ŠÍP, 2001: Geografie cestovního ruchu, Vydalo Karolinum Praha, 228s.					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 453					
A	B	C	D	E	FX
14.79	24.06	28.04	20.97	11.04	1.1
<b>Provides:</b> Mgr. Marián Kulla, PhD., prof. RNDr. Peter Spišiak, CSc.					
<b>Date of last modification:</b> 20.09.2018					

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚGE/ HUG2a/05	<b>Course name:</b> Human geography (productive sphere)
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 1 <b>Per study period:</b> 42 / 14 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 5	
<b>Recommended semester/trimester of the course:</b> 4.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b> Location theories, factors and methods of industry evaluation. Territorial industrial units and regionalisation of the industry in Slovakia. Geographical characteristics of selected types of industry. Relationship of industry and environment. Trends in development and problems of the world economy. Development of agriculture and regularities of distribution of agricultural lands. The agricultural countries and their typology. The land use map. Geography of forests and its typology.	
<b>Recommended literature:</b> FALKOWSKI, J., KOSTROWICKI, J., 2001: Geografia rolnictwa świata. PWN, Warszawa, 516 p. KNOX, P., L., et al. 2010: Human geography. Places and regions in Global Context. Pearson International Edition., 513 p. KOREC, P. 1994: Humánna geografia 1. Prírodovedecká fakulta, Univerzita Komenského, Bratislava, 120 s. MIRVALD, S., 2002: Geografie dopravy II. ZČU Plzeň, 56 s. MIRVALD, S., 2002: Geografie dopravy III. ZČU Plzeň, 43 s. POPJAKOVÁ, D., 1997: Základné kapitoly z geografie priemyslu, Prešov: PU, 144 s. SPIŠIAK, P., 2005: Základy geografie poľnohospodárstva a lesného hospodárstva. Prírodovedecká fakulta, Univerzita Komenského, Bratislava. 140 s. TOUŠEK, V. a kol., 2008: Ekonomická a sociální geografie, Plzeň, 2008, 411 s.	
<b>Course language:</b>	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 628

A	B	C	D	E	FX
7.64	21.34	29.14	27.71	11.62	2.55

**Provides:** prof. RNDr. Peter Spišiak, CSc., Mgr. Marián Kulla, PhD.**Date of last modification:** 29.03.2020**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚGE/ MGS/06	<b>Course name:</b> Hungarian geographical seminar									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 5.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b> Hungarian geographical terminology on particular topics in geology, geomorphology, climatology, hydrography, pedogeography, biogeography. The professionals from the past in Hungary, the system of university studies in Hungary. Hungarian geographical periodicals, monographs.										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 12										
A	B	C	D	E	FX					
100.0	0.0	0.0	0.0	0.0	0.0					
<b>Provides:</b>										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
UGE/15

**Course name:** Introduction to Geography

**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 ECTS credits:** 3

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

The evaluation is based on combination of continuous evaluation (30%) and a final written examination (70%). The credits will not be awarded if evaluation is less than the E grade from both parts of evaluation. The E grade will not be awarded for the final written examination if student is successful less than 50%.

**Learning outcomes:**

Students profit a basic orientation in the position and structure of the department, current development trends and literature. Students will create a comprehensive picture of discovering Earth and the gradual development of geography from the earliest times to the present in the context of the most important personalities and milestones of development. Students profit a basic information about the personality of Geography and applications of geography into practice.

**Brief outline of the course:**

Home geographic discipline is to provide students a basic orientation – object Geography, subject Geography, Landscape sphere of the Earth, System of geographic sciences (Haggett model, Demko model, model of Mičian, Lauko model), application geographic knowledge into practice, development of geographic thought (Period before Antik - oldest maps, market, strategic importance of geographic information, Ancient period - Greek geography, cosmological ideas - Roman geography, new cartographic methods, Mediaeval period - Arab geography, market, belief, cartography, compass, Period of large geographic discoveries - rediscovery of America, Around the World, Australia, Antarctica, Northern sea way), personality Geography (Humboldt, Ritter, Hetner, Bel, Hromádka, Lukniš), Human Geography, Regional Geography (basic theories and their representatives), Hettner School, use geography in practice.

**Recommended literature:**

MICHAELI, E., IVANOVÁ, M. (2015). Geografická tektológia - metageografia. PU FHPV Prešov. 252 s.

PAULOV, J. (2014). Dejiny geografie a jej vedecký status. Geografický časopis, 66, 1, s. 39-47.

PAULOV, J. (2012). Základné paradigmy v rozvoji geografie ako vedy: pokus o stručnú identifikáciu. Geografický časopis, 64, 2, 2012, s. 111-120.

PAULOV, J. (2012). Čo je "nová ekonomická geografia"? pokus o stručnú charakteristiku. Geografický časopis, 64, 1, s. 47-54.

- HOFIERKA, J. (2012). Geoinformatika ako interdisciplinárna vedná oblasť a jej vzťah ku geografii. *Geografický časopis*, 63, s. 345-355.
- DEMEK, J. (1987). Úvod do štúdia teoretickej geografie. Bratislava, SPN. 241 s.
- MIČIAN, Ľ (2008). Všeobecná geoekológia. UK Bratislava, 87 s.
- MIČIAN, Ľ., ZATKALÍK, F. (1986). Náuka o krajine a starostlivosť o životné prostredie. UK Bratislava, s. 137.
- RIEDLOVÁ, M., DEMEK, J., PECH, J. (1980). Úvod do studia geografie, dějiny geografie. Praha, SPN, 158 s.

**Course language:**

Slovak

**Notes:**

**Course assessment**

Total number of assessed students: 863

A	B	C	D	E	FX
10.43	12.05	27.23	26.3	22.6	1.39

**Provides:** prof. Mgr. Jaroslav Hofierka, PhD.

**Date of last modification:** 16.09.2017

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> Dek. PF UPJŠ/USPV/13	<b>Course name:</b> Introduction to Study of Sciences
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice	
<b>Recommended course-load (hours):</b> <b>Per week:</b> Per study period: 12s / 3d	
<b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 1554	
abs	n
88.61	11.39
<b>Provides:</b> prof. RNDr. Viliam Geffert, DrSc.	
<b>Date of last modification:</b> 25.09.2019	
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.	

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
KVA/15      **Course name:** Landscape in the Quarternary

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

**Course type:** Lecture / Practice

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

**Per week:** 2 / 1 **Per study period:** 28 / 14

**Course method:** present

**Number of ECTS credits:** 4

**Recommended semester/trimester of the course:** 5.

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

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 349

A	B	C	D	E	FX
46.7	30.37	16.05	5.44	1.43	0.0

**Provides:** doc. RNDr. Zdenko Hochmuth, CSc., Ing. Katarína Bónová, PhD.

**Date of last modification:** 08.09.2016

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚMV/  
MTB/13

**Course name:** Mathematics for biologists

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

**Course type:** Lecture / Practice

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

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

**Course method:** present

**Number of ECTS credits:** 5

**Recommended semester/trimester of the course:** 2., 4., 6.

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

Short introduction to mathematics, mathematical problem solving strategies and their applications to solving problems in biology and other sciences.

**Brief outline of the course:**

1. Basic terms
2. Geometry in the plane (vectors, lines in the plane and their representations)
3. Systems of linear equations (linear equation and inequality, system of linear equations, Gaussian elimination)
4. Functions (monotonicity, local extrema, function composition, inverse function, elementary functions and their properties)
5. Combinatorics (binomial theorem, combinations and permutations without / with repetition, inclusion-exclusion principle)
6. Sequences and series (monotonicity and boundedness, recurrent sequence, geometric series)
7. Limit (limit of a sequence, limit of function, convergence, divergence, methods for computing limits, continuity)
8. Derivatives (sum, product, quotient and chain rule, derivatives of elementary functions, Taylor polynomial, analysis of functions)
9. Integrals (indefinite integral, integration methods: by substitution, by parts, by partial fractions; definite integral)
10. Ordinary differential equations (first order separable ODE, first order linear ODE)

**Recommended literature:**

E. Bohl, Mathematik in der Biologie, Springer, Berlin Heidelberg, 2006.

D. Studenovská, T. Madaras, S. Mockovčiak: Zbierka úloh z matematiky pre nematematické odbory, UPJŠ 2006.

D. Studenovská, T. Madaras: Matematika pre nematematické odbory, UPJŠ 2006.

**Course language:**

Slovak

**Notes:**

**Course assessment**

Total number of assessed students: 541

A	B	C	D	E	FX
7.95	11.28	16.82	19.78	32.9	11.28

**Provides:** RNDr. Igor Fabrici, Dr. rer. nat.**Date of last modification:** 03.05.2015**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
MIK/15      **Course name:** Microgeography

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

**Course type:** Practice

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

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

**Course method:** present

**Number of ECTS credits:** 3

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

Účasť na cvičení, vypracovanie a prezentácia semestrálnej práce, absolvovanie záverečného testu. Kredity sa neudelia študentovi, ktorý nebude mať úspešne spracovanú a odprezentovanú semestrálnu prácu a neabsoluje záverečný test min. na 50%. Semestrálna práca musí byť spracovaná podľa pokynov vyučujúceho, týkajúcich sa rozsahu, štruktúry a mapových príloh. Výsledná známka je daná váženým priemerom podľa kľúča: 2x známka za semestrálnu prácu + 1x známka z testu/3 = výsledná známka.

**Learning outcomes:**

Ability of synthesis and analysis of selected micro-region for the needs of local government.

**Brief outline of the course:**

1. The micro-region and the local region in the context of regional taxonomic levels. 2. Theory and Methodology, collection of information (data collection). 3. Differentiation landscape sphere and cultural landscapes of the example chosen region (Location - Geology - Relief - Climate - Rivers - Soils - Flora - Fauna - Population (population dynamics, forecasts, Statistical offices) - Settlements (change in the function of settlements, place in the settlement system, land use map, questionnaires, mapping) - Primary sector - Secondary sector - Tertiary Sector. 4. Regionalization – branch, complex, land use. 5. TUR - MUSES - USES - RUSES. 6. Complex presentation of the research territory at the Municipal Office.

**Recommended literature:**

DUBCOVÁ, A. 2012: Mikrogeografia – krajina okolo nás, UKF Nitra, 185 s.

HASPROVÁ, M. 2006: Geografia miestnej krajiny v edukačnom procese, UKF Nitra, 203 s.

KANDRÁČOVÁ, V., MICHAELI, E. 1996: Mikrogeografia v edukácii, výskume a pre prax.

In: Krajina východného Slovenska v odborných a vedeckých prácach. Prešov: KGG PdF UPJŠ, 1997, s. 265 – 285.

KANDRÁČOVÁ, V., MICHAELI, E. 1998: Ľubotice. OÚ Ľubotice. 116 s.

KOLEKTÍV, 1977: Vlastivedný slovník obcí na Slovensku diely I-II, Veda Bratislava. 528 s., 519 s.

KOLEKTÍV, 1978: Vlastivedný slovník obcí na Slovensku diely III, Veda Bratislava. 533 s.

LUKNIŠ, M. 1946: Jakubiany. In: Sborník prác PriF Slovenskej univerzity v Bratislave – Práce Geografického ústavu. Bratislava, PriF SU, 1946, zväzok XIV., č. 2, 67 s.

- LUKNIŠ, M., 1977: Geografia krajiny Jura pri Bratislave. UK, Bratislava. 211 s.  
 MICHALOVÁ, J., MICHAL, P. 1980: Geografia okresu Veľký Krtíš, Osveta, Bratislava, 288 s.  
 MLÁDEK, J. et al. 1993: Región Poprad, geografické štruktúry socioekonomickej aktivít. UK, Bratislava, 205 s.  
 ŠIŠÁK, J. 1970: Geografia Rožňavskej kotliny a jej horskej obruby. OBZOR, Bratislava, 319 s.

**Course language:**

Slovak

**Notes:**

**Course assessment**

Total number of assessed students: 72

A	B	C	D	E	FX
45.83	40.28	11.11	2.78	0.0	0.0

**Provides:** prof. RNDr. Peter Spišiak, CSc.

**Date of last modification:** 20.09.2018

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ MKV/15	<b>Course name:</b> Mikrobiológia a základy virológie									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture / Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b>										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
Attendance of practicals (at least 90%), 2 written examinations during semester, final oral examination										
<b>Learning outcomes:</b>										
Students will obtain a basic informations on viruses, prokaryotic and eukaryotic microorganisms, their cytology, physiology, genetics, ecology, classification, and importance . Information on basic methods for studying microorganisms will be provided.										
<b>Brief outline of the course:</b>										
Viruses, prokaryotic and eukaryotic microorganisms, their cytology, physiology, genetics, ecology, classification. The importance of microorganisms for humans and environment.										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 1376										
A	B	C	D	E	FX					
22.09	13.15	18.02	19.91	22.24	4.58					
<b>Provides:</b> doc. RNDr. Peter Pristaš, CSc., RNDr. Mariana Kolesárová, PhD., RNDr. Lenka Maliničová, PhD.										
<b>Date of last modification:</b> 07.10.2015										
<b>Approved:</b> prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ MB1/01	<b>Course name:</b> Molecular Biology				
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 <b>Per study period:</b> 42 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Oral examination.					
<b>Learning outcomes:</b> To provide the students with knowledge of molecular basis of inheritance and control of gene expression and development.					
<b>Brief outline of the course:</b> Structure and properties of information macromolecules. Molecular mechanisms of DNA replication and repair, transcription and translation. Prokaryotic and eukaryotic genome. Control of gene expression in prokaryotes and eukaryotes. Control of cell cycle.					
<b>Recommended literature:</b> Lodish, H., Baltimore, D., Berk, A. et al.: Molecular Cell Biology. Sci. Amer. Books Inc., W.H. Freeman and Company, New York, 1995 Myers, R.A.: Molecular Biology and Biotechnology. VCH Publishers Inc., New York, 1995					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 926					
A	B	C	D	E	FX
6.59	11.02	17.06	18.25	33.91	13.17
<b>Provides:</b> doc. RNDr. Peter Solár, PhD.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.					

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** KPE/  
Pg/15      **Course name:** Pedagogy

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

**Course type:** Lecture

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

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

**Course method:** present

**Number of ECTS credits:** 2

**Recommended semester/trimester of the course:** 3., 5.

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 512

A	B	C	D	E	FX
21.68	24.22	25.78	16.02	11.33	0.98

**Provides:** PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Boberová, PhD.

**Date of last modification:** 13.09.2019

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
EXFG/15      **Course name:** Physical Geography Excursion

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

**Course type:** Practice

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

**Per week:** Per study period: 6d

**Course method:** present

**Number of ECTS credits:** 3

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 708

A	B	C	D	E	FX
89.97	7.77	1.27	0.14	0.42	0.42

**Provides:** doc. RNDr. Zdenko Hochmuth, CSc., RNDr. Dušan Barabas, CSc., RNDr. Alena Gessert, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
FGS/15

**Course name:** Physical Geography of Slovakia

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

**Course type:** Lecture / Practice

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

**Per week:** 2 / 1 **Per study period:** 28 / 14

**Course method:** present

**Number of ECTS credits:** 5

**Recommended semester/trimester of the course:** 5.

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 460

A	B	C	D	E	FX
21.09	28.91	31.09	13.04	3.91	1.96

**Provides:** doc. RNDr. Zdenko Hochmuth, CSc., RNDr. Alena Gessert, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚGE/ FYG1/03	<b>Course name:</b> Physical geography 1									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 3 / 1 <b>Per study period:</b> 42 / 14 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b> 3.										
<b>Course level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b> Hydrology of the running water, genesis and development of river basins, measuring of water and its flow. Genesis and the main types of lakes, temperatures, water movements. Sea and water currents, its chemical properties, relief of the sea-floor. Subsurface waters, glaciers. In the section of soil science and soil geography, physical and chemical nature of soils will be treated as well as actual and presently used systems of the soil classification. Distribution of different soil types in the world and Slovakia, principles of the soil zonality.										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 660										
A	B	C	D	E	FX					
2.42	4.7	18.64	28.33	38.48	7.42					
<b>Provides:</b> RNDr. Dušan Barabas, CSc., RNDr. Alena Gessert, PhD.										
<b>Date of last modification:</b> 16.09.2017										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
FYG2/05

**Course name:** Physical geography 2

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

**Course type:** Lecture / Practice

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

**Per week:** 3 / 1 **Per study period:** 42 / 14

**Course method:** present

**Number of ECTS credits:** 5

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

Atmospheric conditions and their physical origins, general planetary air circulation, most important climatic types and the climate of Slovakia. Measuring of the basic meteorological events will be done by students in the practical part of this course. In the study of biogeography we will focus on the biosphere as a part of the physical-geographic sphere. Further focus will be put on the function and position of organisms on the surface, as well as the main regularities of their distribution throughout the world. Phytogeographical and zoogeographical regions of the world and Slovakia. In the practical part students acquaint with the soil profiles and important kinds of plants in Slovakia.

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 649

A	B	C	D	E	FX
28.66	27.89	25.58	11.09	6.32	0.46

**Provides:** doc. RNDr. Zdenko Hochmuth, CSc., RNDr. Alena Gessert, PhD.

**Date of last modification:** 25.09.2018

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
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 ECTS credits:** 5

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

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

**Prerequisites:**

**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: 355

A	B	C	D	E	FX
38.87	22.25	21.69	8.17	8.17	0.85

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

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
PLG/15

**Course name:** Planetary Geography

**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 ECTS credits:** 3

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

**Course level:** I.

**Prerequisites:**

**Conditions for course completion:**

The evaluation is based on a combination of continuous and final control. The continuous control is carried out in the form of tasks on individual work with a share of 30% of the resultant evaluation. The final control is written and constitutes 70% of the resultant evaluation. The resultant evaluation is a weighted average of the continuous (30%) and final (70%) control. Credits will be awarded only to a student who achieves the evaluation at the minimum level of the mark E in every part of the evaluation.

**Learning outcomes:**

The learning result is getting the basics of astronomy and astrophysics in terms of planetary geography.

**Brief outline of the course:**

A brief overview of astronomy. The emergence and development of fundamental knowledge about the Earth and the universe. Space system components and building solar system: origin and evolution of the solar system and solar system objects. Mechanics of the solar system - Kepler's laws of planetary orbits elements, aspects, and anomalies, solar system objects. Celestial sphere. Movements of the sun, moon and celestial bodies. Basic data on the Earth. Movements of Earth and their geographical implications. Coordinate systems and basic orientation on the surface. Time and calendar, timing and time zones.

**Recommended literature:**

Andrle, P., 1971: Základy nebeskej mechaniky. Praha: Academia, 1971, 305s.

Brázdil, R., Mucha, L., Okáč, Z., 1981: Matematická geografie. Praha: NTL, 1981, 273s.

Brázdil, R. a kol., 1988: Úvod do studia planety Země. Praha: SPN, 1988, 365 s.

Čeman, R., Pittich E., 2005: Vesmír I - Slnečná sústava. Bratislava: MAPA Slovakia, 2005, 383s.

Čapek, R. 1992: Planetární geografie. Praha: Karolinum, Praha, 84s.

Dušek, J., Grigar, J. a Pokorný, Z., 2009: Náš vesmír. Praha: Aventinum, 2009, 255s., ISBN: 9788086858654.

Farndon, J., 2003: 1000 zaujímavostí o vesmíre. Bratislava: Belimex, 2003, 224s., ISBN: 80-89083-33-1.

Ferris, T., 2005: Všetko o vesmíre. Bratislava: Remedium, 2005, 415s., ISBN: 8088993857.

Grego, D., 2011: Neuveriteľný vesmír, Praha: Albatros, 2011, 120s., ISBN: 978-80-00-02818-7.

Hilbert, H., 2001: Vybrané kapitoly z planetárnej geografie. Banká Štiavnica: UMB Fakulta prírodných vied, 2001, 96s.

Hlaváč, Z., 2000: Základy sférické astronomie a nebeské mechaniky, Plzeň: Západočeská univerzita, 2000, ISBN 80-7082-694-0.

Jakeš, P., 1984: Planeta Země. Praha: Mladá fronta, 1984, 416s.

Némethová, J. a Garai, Z., 2008: Zbierka otázok a úloh z planetárnej geografie. Nitra: UKF, 2009, ISBN: 9788080945602.

Astronomická ročenka 2013, 2014, journal, Hurbanovo: Slovenská ústredná hvezdáreň (Slovak Central Observatory).

**Course language:**

Slovak

**Notes:**

without notices

**Course assessment**

Total number of assessed students: 483

A	B	C	D	E	FX
25.67	21.95	23.19	20.08	5.38	3.73

**Provides:** prof. Ing. Vladimír Sedlák, PhD.

**Date of last modification:** 10.02.2020

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ FR1/10	<b>Course name:</b> Plant Physiology									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 3 <b>Per study period:</b> 28 / 42 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 6										
<b>Recommended semester/trimester of the course:</b> 4.										
<b>Course level:</b> I.										
<b>Prerequisites:</b> ÚBEV/VB1/01										
<b>Conditions for course completion:</b> Active participation on practicals. Oral examen										
<b>Learning outcomes:</b> Overview of all important physiological processes in plant organisms.										
<b>Brief outline of the course:</b> Water in plan, mineral nutrition, photosynthesis, pholem transport, respiration, lipid biosynthesis, heterotrophy, metabolism of macronutrients, secondary metabolism, growth and development, plant hormones, photoreceptors, dormancy, germination, flowering, plant movements, stress physiology Lab practicals: Measurements of water potential, Quantitative analyses of nutrients in dust. Separation of assimilation pigments by TLC. Quantitative analyses of chlorophyll a and b. Biostest of cytokinins. Qualitative and quantitative analyses of sugars. HPLC separation of glucose and fructose. Measurements of respiration by selective electrode. Measurement of total nitrogen by Kjeldahl method. Qualitative analyses of proteins. Activity of some enzymes in potato and pea. Colour of anthocyanins at different pH. Measurement of silica level by distillation method. Germination of seeds.										
<b>Recommended literature:</b> Hopkins W.G. Huner N.P.A., Introduction to plant physiology. 3rd ed., Wiley, New York 2004										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 1643										
A	B	C	D	E	FX					
14.67	12.78	15.4	13.82	23.74	19.6					
<b>Provides:</b> prof. RNDr. Miroslav Repčák, DrSc., Mgr. Silvia Gajdošová, Ph.D., doc. RNDr. Peter Paľove-Balang, PhD.										
<b>Date of last modification:</b> 26.03.2020										

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚGE/ PVS/15	<b>Course name:</b> Population growth in Slovakia
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 1 <b>Per study period:</b> 28 / 14 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 4	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> The evaluation of student's performance is implemented through a combination of current, random control during the term and the examination part within a particular period of the semester. This type of continuous control includes at least 80% of students' active participation in teaching and successful solutions of given assignments. If a student does not follow and fullfil these two conditions, i. e. compulsory active learning part of the course, together with active participation and in addition will not solve assigned tasks successfully cannot register, assign for the examination (oral/written). If the student receives more than 51% in the written form may proceed to the oral form. If a student does not demonstrate particular knowledge during the oral examination student has to take both forms of the examination once again.	
<b>Learning outcomes:</b> The Student shall acquires deeper knowledge of the population of Slovakia in terms of time and 3-D.	
<b>Brief outline of the course:</b> Development of the population and its spatial differentiation, population Dynamics (natural, migration, the total movement); Reproduction of the population; Migration for work, Foreign and internal migration; The ageing of the population; The specificities of the Roma population in Slovakia; The educational structure of the population; Economic, social, according to the marital status of the population structure; Ethnic and religions structure of the population ; Slovakia in the EU in terms of population processes; The demographic future of Slovakia. Seminars Workshops during the semester are focused on filling the solution of tasks in order to practice or demonstrate the phenomena studied in the different regional units.	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 119

A	B	C	D	E	FX
68.07	2.52	5.88	6.72	13.45	3.36

**Provides:** prof. RNDr. Peter Spišiak, CSc., RNDr. Janetta Nestorová-Dická, PhD.**Date of last modification:** 29.03.2020**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/PP/15	<b>Course name:</b> Positive Psychology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
Per week: 2 Per study period: 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 4., 6.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 219										
A	B	C	D	E	FX					
98.17	0.91	0.46	0.0	0.46	0.0					
<b>Provides:</b> Mgr. Jozef Benka, PhD. et PhD.										
<b>Date of last modification:</b> 25.03.2020										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/Ps/15	<b>Course name:</b> Psychology									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 1., 3., 5.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 402										
A	B	C	D	E	FX					
16.67	13.18	22.64	21.89	21.89	3.73					
<b>Provides:</b> prof. PhDr. Ol'ga Orosová, CSc., PhDr. Anna Janovská, PhD., Mgr. Jozef Benka, PhD. et PhD.										
<b>Date of last modification:</b> 18.03.2019										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPPaPZ/PKŽ/15	<b>Course name:</b> Psychology of Everyday Life									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
Per week: 2 Per study period: 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 3.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 146										
A	B	C	D	E	FX					
54.11	11.64	24.66	6.85	2.05	0.68					
<b>Provides:</b> Mgr. Ondrej Kalina, PhD.										
<b>Date of last modification:</b> 18.03.2019										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
RUR/15      **Course name:** Rural Geography

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

**Course type:** Lecture / Practice

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

**Per week:** 2 / 1 **Per study period:** 28 / 14

**Course method:** present

**Number of ECTS credits:** 4

**Recommended semester/trimester of the course:** 6.

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

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 349

A	B	C	D	E	FX
40.69	33.52	17.48	6.3	1.43	0.57

**Provides:** prof. RNDr. Peter Spišiak, CSc.

**Date of last modification:** 01.04.2020

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPE/ OLŠ/15	<b>Course name:</b> School Administration and Legislation									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
Per week: 2 Per study period: 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 3., 5.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 208										
A	B	C	D	E	FX					
40.38	27.88	18.75	8.65	3.37	0.96					
<b>Provides:</b> Mgr. Zuzana Boberová, PhD.										
<b>Date of last modification:</b> 17.09.2019										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

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

**Date of last modification:** 15.03.2019

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KFaDF/ VKFV/07	<b>Course name:</b> Selected Topics in Philosophy of Education (General Introduction)									
<b>Course type, scope and the method:</b>										
<b>Course type:</b>										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> Per study period:										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 3., 5.										
<b>Course level:</b> I.										
<b>Prerequisites:</b> KFaDF/DF1/05										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 0										
A	B	C	D	E	FX					
0.0	0.0	0.0	0.0	0.0	0.0					
<b>Provides:</b> doc. PhDr. Pavol Tholt, PhD., mim. prof.										
<b>Date of last modification:</b>										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚGE/ SBP1/13	<b>Course name:</b> Seminar for Bachelor Thesis I.
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 5.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> Verification of acquired basic methodologic and formal procedures of the final thesis creation by presentation (70% of rating) and written examination (30%). To obtain A grade, weighted average of the both parts of examination must reach at least 90%, To obtain B it is 80%, for C it is 70%, for D 60% and for E 50%. Credits shall not be granted to a student who obtain less than 50% from any of both parts of examination.	
<b>Learning outcomes:</b> Mastering basic theoretical, methodological and formal scientific procedures of bachelor thesis creation.	
<b>Brief outline of the course:</b> The content and form of selected parts of thesis writing (abstract, introduction, conclusion, etc.) Ethics and culture of writing diploma thesis, citations and references, types of sources (printed, electronic, etc.). Formal aspects of the thesis. Linguistic adjustment (terminology, stylistics, syntax, grammar, typography). Rules of presentation of the thesis. Presentation of current results and state of diploma thesis.	
<b>Recommended literature:</b> ÚTVAR REKTORA UPJŠ 2019: Základné usmernenia a dokumenty k záverečným prácам na UPJŠ v Košiciach. Dostupné na: < <a href="https://www.upjs.sk/pracoviska/univerzitna-kniznica/zaverecne-prace/">https://www.upjs.sk/pracoviska/univerzitna-kniznica/zaverecne-prace/</a> >. ÚSTAV GEOGRAFIE PF UPJŠ 2019: Pokyny na tvorbu záverečných prác na Ústave gego-rafie Prírodovedeckej fakulty UPJŠ v Košiciach. Dostupné na: < <a href="https://geografia.science.upjs.sk/images/studium/Pokyny_ZP_UGE_2019.pdf">https://geografia.science.upjs.sk/images/studium/Pokyny_ZP_UGE_2019.pdf</a> >. HOVORKA, D., KOMÁREK, K., CHRAPAN, J. 2011: Ako písat' a komunikovať. Martin (Vydavateľstvo Osveta). KATUŠČÁK, D. 2008: Ako písat' záverečné a kvalifikačné práce. Nitra (Enigma).	
<b>Course language:</b> Slovak	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 390

A	B	C	D	E	FX
94.62	3.85	0.77	0.0	0.77	0.0

**Provides:** prof. Mgr. Jaroslav Hofierka, PhD., Mgr. Ladislav Novotný, PhD.**Date of last modification:** 16.09.2019**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚGE/ SBP2/13	<b>Course name:</b> Seminar for Bachelor Thesis II.				
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 2					
<b>Recommended semester/trimester of the course:</b> 6.					
<b>Course level:</b> I.					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Verification of acquired methodological and formal procedures of the creation of bachelor thesis by the presentation of current thesis creation by presentation of own bachelor thesis (100% of rating). To obtain A grade, the rating of student's presentation must reach at least 90%, To obtain B it is 80%, for C it is 70%, for D 60% and for E 50%. Credits shall not be granted to a student who obtain rating less than 50%.					
<b>Learning outcomes:</b> Acquired skills to apply theoretical, methodological and formal scientific procedures of diploma thesis creation.					
<b>Brief outline of the course:</b> The seminary is focused to the topics of individual bachelor thesis. Students present current state of their thesis, its content and its particular parts. Each bachelor thesis is discussed at scientific level.					
<b>Recommended literature:</b> HOVORKA, D., KOMÁREK, K., CHRAPAN, J. 2011: Ako písat' a komunikovať. Martin (Vydavateľstvo Osveta), 247 s. KATUŠČÁK, D. 2008: Ako písat' záverečné a kvalifikačné práce. Nitra (Enigma), 162 s. ÚTVAR REKTORA UPJŠ (2011): Smernica č. 1/2011, Dostupné na internete: < <a href="http://www.upjs.sk/public/media/2438/smernica-1-2011.pdf">http://www.upjs.sk/public/media/2438/smernica-1-2011.pdf</a> >, 25 s.					
<b>Course language:</b> Slovak					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 351					
A	B	C	D	E	FX
70.09	21.08	7.41	0.57	0.28	0.57
<b>Provides:</b> prof. Mgr. Jaroslav Hofierka, PhD., Mgr. Ladislav Novotný, PhD.					
<b>Date of last modification:</b> 03.05.2015					

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPO/ SPKVV/15	<b>Course name:</b> Social and Political Context of Education									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Lecture										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 4., 6.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 19										
A	B	C	D	E	FX					
42.11	0.0	26.32	26.32	5.26	0.0					
<b>Provides:</b> Dr.h.c. prof. PhDr. Marcela Gbúrová, CSc.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KGER/ OJPV1/07	<b>Course name:</b> Specialised German Language - Natural Sciences 1									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
Per week: 2 Per study period: 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 4.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 139										
A	B	C	D	E	FX					
22.3	23.02	24.46	21.58	7.91	0.72					
<b>Provides:</b> Mgr. Andreas Schiestl										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

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

**Course assessment**

Total number of assessed students: 12947

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

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

**Date of last modification:** 18.03.2019

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Course assessment**

Total number of assessed students: 11186

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

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

**Date of last modification:** 18.03.2019

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚTVŠ/  
TVc/11      **Course name:** Sports Activities III.

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

**Course type:** Practice

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

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

**Course method:** present

**Number of ECTS credits:** 2

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

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

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 7741

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
90.03	0.04	0.01	0.0	0.0	0.03	4.04	5.85

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

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚTVŠ/  
TVd/11      **Course name:** Sports Activities IV.

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

**Course type:** Practice

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

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

**Course method:** present

**Number of ECTS credits:** 2

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

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

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 5086

abs	abs-A	abs-B	abs-C	abs-D	abs-E	n	neabs
85.19	0.29	0.04	0.0	0.0	0.0	6.78	7.69

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

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

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

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

**Course type:**

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

**Per week:** Per study period:

**Course method:** present

**Number of ECTS credits:** 4

**Recommended semester/trimester of the course:** 4., 6.

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

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 277

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

**Provides:**

**Date of last modification:** 03.05.2015

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚGE/  
SVG/04

**Course name:** Student Scientific Conference in Geography

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

**Course type:**

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

**Per week: Per study period:**

**Course method:** present

**Number of ECTS credits:** 4

**Recommended semester/trimester of the course:** 6.

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

**Prerequisites:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

After choosing a topic suggested by supervisors implying a geographical problem, the students will work on the topic, write a thesis and defense it before the committee.

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 170

A	B	C	D	E	FX
99.41	0.0	0.0	0.0	0.0	0.59

**Provides:** doc. RNDr. Zdenko Hochmuth, CSc., prof. RNDr. Peter Spišiak, CSc., RNDr. Dušan Barabas, CSc., RNDr. Alena Gessert, PhD., RNDr. Janetta Nestorová-Dická, PhD., Mgr. Marián Kulla, PhD., Ing. Katarína Bónová, PhD., RNDr. Stela Csachová, PhD.

**Date of last modification:** 31.03.2020

**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚMV/ DGS/15	<b>Course name:</b> Students' Digital Literacy
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 <b>Per study period:</b> 28 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 1.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> continuous assessment and final project	
<b>Learning outcomes:</b> To acquire an overview of the current possibilities of digital technology to develop skills and competencies with emphasis on the area of communication, social interaction and personal. To acquire basic digital skills for working with advanced technologies (mobile phone, tablet, laptop, social media, online webtechnologies). To understand the value of existing advanced technologies for better and more effective learning, work and active life in higher education, lifelong learning and further career prospects.	
<b>Brief outline of the course:</b> Introduction to the problems of current, commonly available digital technology. Tools for access to online information source (mobile applications for access to information systems, databases, data books). Tools for collecting, generating direct information and data and its subsequent analysis and visualization. Tools for providing and sharing of electronic content (cloud technology - Google Drive, Youtube, Google+, Skydrive, Dropbox). Tools for communication, discussion and collaborative activities. Legal work with digital technologies and resources, plagiarism, critical evaluation of digital resources. Security, privacy, digital ethics and etiquette, digital citizenship.	
<b>Recommended literature:</b> 1. Bruff, D. (2009). Teaching with classroom response systems: Creating active learning environments. San Francisco: Jossey-Bass. 2. Byrne, R. (2012). Google Drive and Docs for Teachers. Free Tech for Teachers. 3. Kawasaki, G. (2012). What the Plus! Google+ for the Rest of Us. Amazon digital Services. 4. Kolb, L. (2011). Cell Phones in the Classroom: A Practical Guide for Educators. International Society for Technology in Education.	
<b>Course language:</b> Slovak	
<b>Notes:</b>	

**Course assessment**

Total number of assessed students: 195

abs	n
96.92	3.08

**Provides:** doc. RNDr. Stanislav Lukáč, PhD., doc. RNDr. Jozef Hanč, PhD., doc. RNDr. Ľubomír Šnajder, PhD.**Date of last modification:** 03.05.2015**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

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

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

**Course type:** Practice

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

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

**Course method:** present

**Number of ECTS credits:** 2

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

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

**Prerequisites:**

**Conditions for course completion:**

Conditions for course completion:

Attendance

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

**Learning outcomes:**

Learning outcomes:

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

**Brief outline of the course:**

Brief outline of the course:

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

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 151

abs	n
45.03	54.97

**Provides:** Mgr. Peter Bakalár, PhD.**Date of last modification:** 18.03.2019**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Course assessment**

Total number of assessed students: 392

abs	n
44.39	55.61

**Provides:** Mgr. Marek Valanský, MUDr. Peter Dombrovský**Date of last modification:** 15.03.2019**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> KPE/ TVE/08	<b>Course name:</b> Theory of Education									
<b>Course type, scope and the method:</b>										
<b>Course type:</b> Practice										
<b>Recommended course-load (hours):</b>										
<b>Per week:</b> 2 <b>Per study period:</b> 28										
<b>Course method:</b> present										
<b>Number of ECTS credits:</b> 2										
<b>Recommended semester/trimester of the course:</b> 4., 6.										
<b>Course level:</b> I.										
<b>Prerequisites:</b>										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b>										
<b>Brief outline of the course:</b>										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b>										
Total number of assessed students: 429										
A	B	C	D	E	FX					
31.0	35.66	22.38	6.76	1.63	2.56					
<b>Provides:</b> Mgr. Zuzana Boberová, PhD., Mgr. Katarína Petriková, PhD.										
<b>Date of last modification:</b> 20.03.2020										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚGE/ TPM/13	<b>Course name:</b> Topographic field mapping
<b>Course type, scope and the method:</b>	
<b>Course type:</b> Practice	
<b>Recommended course-load (hours):</b>	
<b>Per week:</b> Per study period: 3d	
<b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b> 2.	
<b>Course level:</b> I.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b>	
Total number of assessed students: 30	
abs	n
96.67	3.33
<b>Provides:</b> prof. Ing. Vladimír Sedlák, PhD., doc. RNDr. Ján Kaňuk, PhD.	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.	

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Science	
<b>Course ID:</b> ÚTVŠ/ ZKLS//13	<b>Course name:</b> Winter Ski Training Course
<b>Course type, scope and the method:</b> <b>Course type:</b> Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 36 <b>Per study period:</b> 504 <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 2	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b>	
<b>Learning outcomes:</b>	
<b>Brief outline of the course:</b>	
<b>Recommended literature:</b>	
<b>Course language:</b>	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 97	
abs	n
32.99	67.01
<b>Provides:</b> doc. PhDr. Ivan Šulc, CSc., Mgr. Marek Valanský	
<b>Date of last modification:</b> 03.05.2015	
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.	

## COURSE INFORMATION LETTER

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

**Course assessment**

Total number of assessed students: 913

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

**Provides:** prof. RNDr. Ľubomír Kováč, CSc.**Date of last modification:** 05.10.2017**Approved:** prof. RNDr. Pavol Mártonfí, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

**Course ID:** ÚBEV/  
ZO1/03      **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 ECTS credits:** 5

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

**Course level:** I.

**Prerequisites:** ÚBEV/PMZ/10

**Conditions for course completion:**

**Learning outcomes:**

Basis of Invertebrata taxonomy- 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:**

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 1097

A	B	C	D	E	FX
8.02	14.95	21.7	21.24	24.7	9.39

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

**Date of last modification:** 14.11.2016

**Approved:** prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ ZO1/15	<b>Course name:</b> Zoology I									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 4										
<b>Recommended semester/trimester of the course:</b> 3.										
<b>Course level:</b> I.										
<b>Prerequisites:</b> ÚBEV/PMZ/10										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b> Basis of Invertebrata taxonomy including taxonomy of Monocytzoa. Importance and function of chosen individual taxons. Phylogenetic relations.										
<b>Brief outline of the course:</b> Anatomy, morphology and development of separate groups of Invertebrates – especially Porifera, Cnidaria, Plathelminthes, Nemathelminthes, Mollusca, Anelida, Arthropoda, Echinodermata. Characteristic species.										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 224										
A	B	C	D	E	FX					
7.14	18.75	20.98	26.34	19.64	7.14					
<b>Provides:</b> doc. RNDr. Ľubomír Panigaj, CSc., RNDr. Peter Ľuptáčik, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice										
<b>Faculty:</b> Faculty of Science										
<b>Course ID:</b> ÚBEV/ ZOO1/03	<b>Course name:</b> Zoology II									
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present										
<b>Number of ECTS credits:</b> 5										
<b>Recommended semester/trimester of the course:</b> 4.										
<b>Course level:</b> I.										
<b>Prerequisites:</b> ÚBEV/PMZ/10										
<b>Conditions for course completion:</b>										
<b>Learning outcomes:</b> Fundamental information on taxonomy and morphology of vertebrates										
<b>Brief outline of the course:</b> Systematic and phylogenetic relationships of vertebrate. Review of important groups of fishes, amphibians, reptiles, birds and mammals.										
<b>Recommended literature:</b>										
<b>Course language:</b>										
<b>Notes:</b>										
<b>Course assessment</b> Total number of assessed students: 944										
A	B	C	D	E	FX					
22.56	27.86	18.86	16.31	9.96	4.45					
<b>Provides:</b> doc. RNDr. Marcel Uhrin, PhD., RNDr. Peter Luptáčik, PhD.										
<b>Date of last modification:</b> 03.05.2015										
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.										

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚBEV/ ZOO1/15	<b>Course name:</b> Zoology II				
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture / Practice <b>Recommended course-load (hours):</b> <b>Per week:</b> 2 / 2 <b>Per study period:</b> 28 / 28 <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 4					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> I.					
<b>Prerequisites:</b> ÚBEV/PMZ/10					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b> Fundamental information on taxonomy and morphology of vertebrates					
<b>Brief outline of the course:</b> Systematic and phylogenetic relationships of vertebrate. Review of important groups of fishes, amphibians, reptiles, birds and mammals.					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 158					
A	B	C	D	E	FX
0.63	23.42	19.62	19.62	23.42	13.29
<b>Provides:</b> doc. RNDr. Marcel Uhrin, PhD., RNDr. Peter Luptáčik, PhD.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> prof. RNDr. Pavol Mártonfi, PhD., doc. RNDr. Zdenko Hochmuth, CSc.					