# CONTENT

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/AFV/15 | **Course name:** Activating forms of biology teaching |
|---|---|

**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:** II.

**Prerequisities:** ÚBEV/DIB1/03

**Conditions for course completion:**
Colloquium - presentation of seminar work.

**Learning outcomes:**
Extension of pedagogical skills with new teaching methods resulting from educational and scientific projects solved at the Department of Biology Didactics. Involvement in projects and practical training of innovative activities.

**Brief outline of the course:**
Teacher and student - partners in learning. The development of science skills through IBSE (Inquiry based science education). New approaches to formative and summative assessment in IBSE. New educational technologies supporting IBSE. Different ways of working with text when learning biology. Project management and cooperative methods for biology lessons. Presentation of seminar work.

**Recommended literature:**
Kimáková, K.: Úvod do štúdia didaktiky biológie, elektronický študijný text, 2008
Kireš, M. [et al.] .Bádateľské aktivity v prírodovednom vzdelávaní [Inquiry activities in science education] časť A . - 1. vyd. - Bratislava : Štátny pedagogický ústav, 2016. - 128 s. - Projekt: Establish 244749 ; Sails 2890085. - ISBN 9788081181559
Standards and biology textbooks for Slovak lower and upper secondary schools (ISCED 2, ISCED 3)
Study materials of the internal course published in Moodle https://lms.upjs.sk/login/index.php

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 40

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 65.0 | 20.0 | 15.0 | 0.0 | 0.0 | 0.0 |

**Provides:** PaedDr. Andrea Lešková, PhD., Mgr. Zuzana Boberová, PhD.

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| **Date of last modification:** 16.12.2021 |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. |

**COURSE INFORMATION LETTER**

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|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚFV/ ASFU/22 | **Course name:** Astrophysics |

**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.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
To successfully complete the course, the student must demonstrate sufficient understanding of the basic knowledge of the structure and evolution of the universe. Knowledge of the basic properties of stars and methods of their determination, the structure, evolution and energy sources of stars, the structure of matter in the universe and its evolution is required. The condition for obtaining credits is passing a written or oral exam, preparation, and presentation of a semester essay. The credit evaluation of the course considers the following student workload: direct teaching (1 credit) and assessment (1 credits). The minimum threshold for completing the course is to obtain at least 50% of the total score, using the following rating scale: A (90-100%), B (80-89%), C (70-79%), D (60- 69%), E (50-59%), Fx (0-49%).

**Learning outcomes:**
After completing the lectures, the student will master the basic knowledge about the properties of stars and methods of their determination, structure, evolution and energy sources of stars, the structure of matter in the universe and its evolution. It will also have sufficient physical knowledge and mathematical apparatus to enable independent solving of a various tasks related to astrophysical research.

**Brief outline of the course:**
1. Basic properties of stars and methods of their determination: radiation flux, apparent and absolute magnitude, distances of stars, colors of stars.
2. Temperature of stars, black body radiation, spectra of atoms and molecules, non-thermal radiation.
3. Spectral classifications, luminosity classes, HR diagram, masses of stars.
4. Structure of stars: basic equations of stellar structure, transfer of energy by radiation and convection, production of energy in stars, fusion reactions.
5. Evolution of stars: interstellar matter and formation of stars and stellar systems, Jeans' criterion, protostars.
6. Evolution of stars: main sequence stars, giants, final stages of star evolution - white dwarfs, neutron stars and black holes.
7. Distribution of matter in the universe: Milky Way, its structure, dynamics, and evolution, types of galaxies, quasars, intergalactic matter, local group of galaxies.

8. Clusters and super-clusters of galaxies, large-scale structure of the universe, dark matter, and dark energy.
9. Evolution of the universe: historical development of views on the universe, Olberson's paradox, gravitational paradox, Cosmological principle.
10. Isotropicity and homogeneity of the universe, relic radiation, expansion of the universe. Steady state theory.
11. Relativistic cosmology: cosmological solutions of Einstein's equations, models of the universe and their properties, theory of the expanding universe, the Big Bang, the age of the universe.
12. Origin of the universe: the initial stages of the expansion of the universe, inflationary expansion and nucleogenesis, the formation of galaxies and galaxy clusters.

**Recommended literature:**

1. Carroll, B. W., Ostlie, D. A., An Introduction to Modern Astrophysics, Addison-Wesley Publishing Company, Reading, Massachusetts, 1996;
2. Contopoulos, D. Kotsakis, Cosmology, the structure and evolution of the Universe, Springer, 1984;
3. Pasachoff, J.M., Filippenko, A., The Cosmos: Astronomy in the New Millennium, Cambridge University Press, 2013;
4. Vanýsek, V., Základy astronomie a astrofyziky, Academia, Praha,1980;
5. Čeman, R., Pittich, E., Vesmír 1 - Slnečná sústava, MAPA Slovakia, Bratislava, 2002;
6. Čeman, R., Pittich, E., Vesmír 2 - Hviezdy - Galaxie, MAPA Slovakia, Bratislava, 2003;

**Course language:**
Slovak, English

**Notes:**

**Course assessment**
Total number of assessed students: 34

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 58.82 | 35.29 | 5.88 | 0.0 | 0.0 | 0.0 |

**Provides:** doc. RNDr. Rudolf Gális, PhD.

**Date of last modification:** 06.09.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/BDB/22 | **Course name:** Biology and Didactics of Biology |
|---|---|

**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:**

**Course level:** II.

**Prerequisities:** ÚBEV/VEK1/03 and (ÚBEV/VMK/22 or ÚBEV/MKVU/15) and ÚBEV/DIB1/03

**Conditions for course completion:**
State exams in the subject of biology and didactics of biology are held in the form of an oral exam. The student has to demonstrate professional knowledge of the drawn topic and present it in a broader context. Each topic is assigned a didactic problem, which is to explain and apply to the teaching of the content at the secondary (secondary) or primary (primary) school level (marked).

**Learning outcomes:**
Graduates will gain the ability to teach biology at lower and upper secondary education.

**Brief outline of the course:**
Wider context of general ecology and biology of multicellular organisms and microorganisms.
Didactic elements of teaching biology and their application to specific didactic problems and given content at the level of primary and secondary school.
Strategies and trends in teaching biology and examples of their application in school practice.

**Recommended literature:**
Current school documents in the Slovak Republic.
Other sources are listed in the recommended literature of profile subjects, which are followed by a state exam.

**Course language:**
SK

**Notes:**

**Course assessment**
Total number of assessed students: 74

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 39.19 | 27.03 | 17.57 | 12.16 | 1.35 | 2.7 |

**Provides:**

**Date of last modification:** 13.05.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

**COURSE INFORMATION LETTER**

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|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** KPPaPZ/SNP/09 | **Course name:** Bullying, Violence and Their Prevention |

**Course type, scope and the method:**
**Course type:** Practice
**Recommended course-load (hours):**
**Per week:** 2 **Per study period:** 28
**Course method:** present

**Number of ECTS credits:** 2

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Active participation in seminars. Detailed information will be given.
Active participation - 20%
Seminar work - 40%
Seminar work 2 - 40%

**Learning outcomes:**
Knowledge: the graduate of the course can summarize the latest knowledge about bullying in schools and its consequences.
Skills. The student is able to analyse problem situations related to bullying and solve them. The student will develop professional skills through the implementation of prevention activities in seminars.
Competences. The graduate of the course is sensitive to the issue of bullying, knows how to identify bullying in the early stages and prevent it from developing into serious forms.

**Brief outline of the course:**
Aggressive behavior. Characteristics of actors of bullying (personality, characteristics of family environment). Manifestations and possible causes of bullying. Bullying as a group process. The role of teacher, school and parent in solving bullying. Possibilities of prevention of bullying at the level of school, class, individuals. Primary, secondary and tertiary prevention. Socio-psychological activities used in the prevention of bullying.

**Recommended literature:**
Kolář, M.: Bolest šikanování. Cesta k zastavení epidemie šikanování ve školách. Portál, Praha, 2001
Jánošová a kol. Psychologie školní šikany. Grada, Praha, 2016
Říčan, P.: Agresivita a šikana mezi dětmi. Portál, Praha, 1995
Janošová, P., Kollerová, L., Cakirpaloglu, P., & Vorlíček, R. (2023). Empatie žáků vůči šikanovaným spolužákům. Československá psychologie, 67(1), 1-14.

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 243

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 87.24 | 11.52 | 0.82 | 0.41 | 0.0 | 0.0 |

**Provides:** doc. Mgr. Mária Bačíková, PhD.

**Date of last modification:** 03.09.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPO/ SDaM/15 | **Course name:** Child and Adolescent Sociology |
|---|---|

**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.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 1014

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 49.9 | 28.9 | 14.89 | 3.85 | 1.78 | 0.69 |

**Provides:** doc. Mgr. Alexander Onufrák, PhD.

**Date of last modification:** 29.08.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPE/ MT/09 | **Course name:** Class Management |
|---|---|

**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:** 2.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 613

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 52.04 | 35.4 | 9.79 | 1.47 | 0.49 | 0.82 |

**Provides:** doc. PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Vagaská, PhD.

**Date of last modification:** 12.03.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/OPR/12 | **Course name:** Conservation Biology |
|---|---|

**Course type, scope and the method:**
**Course type:** Lecture / Practice
**Recommended course-load (hours):**
**Per week:** 2 / 0 **Per study period:** 28 / 0
**Course method:** present

**Number of ECTS credits:** 3

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

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

**Prerequisities:**

**Conditions for course completion:**
Mandatory participation in lectures, completion of two semestral written examinations, oral examination.

**Learning outcomes:**
The main goal of the subject is to introduce term biodiversity, principal threats and conservation of species, populations, communities and ecosystems.

**Brief outline of the course:**
Fundamental and origin of conservation biology. Different levels of biodiversity, biodiversity hotspots on Earth. Economic value of biodiversity as the principal argument of nature conservation. Factors leading to biodiversity threats. Extinctions and problems of small populations. Conservation of populations and species, conservation programs and strategies. Classification and management of protected areas, conservation outside the protected areas. Sustainable development, education to conservation of nature.

**Recommended literature:**
Primack R.B., 2010: Essentials of conservation biology. Sinauer Associates, 1-603

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 811

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 73.61 | 15.91 | 6.54 | 2.84 | 0.49 | 0.62 |

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

**Date of last modification:** 14.12.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/MPPc/15 | **Course name:** Continuous Practice Teaching I |
|---|---|

**Course type, scope and the method:**
**Course type:** Practice
**Recommended course-load (hours):**
**Per week: Per study period:** 4t
**Course method:** present

**Number of ECTS credits:** 2

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

**Course level:** II.

**Prerequisities:** ÚFV/MPPb/15

**Conditions for course completion:**
Confirmed list of sittings in on classes and teaching as a confirmation of attendance in the required extent of 6 lessons of sitting in on classes and 18 physics lessons taught by student. Lesson records and written preparation for the lessons.

**Learning outcomes:**
Student gains under the guidance of teacher trainer practical teaching skills within the subject of Physics.

**Brief outline of the course:**
Sitting in on classes, teaching physics lessons by student, consulted with teacher trainer, analysis of observed and taught lessons.

**Recommended literature:**
Textbooks for lower and upper secondary school physics

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 37

| abs | n |
|---|---|
| 100.0 | 0.0 |

**Provides:** doc. RNDr. Jozef Hanč, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ MPPd/15 | **Course name:** Continuous Practice Teaching II |
|---|---|

**Course type, scope and the method:**
**Course type:** Practice
**Recommended course-load (hours):**
**Per week: Per study period:** 6t
**Course method:** present

**Number of ECTS credits:** 2

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

**Course level:** II.

**Prerequisities:** ÚFV/MPPc/15

**Conditions for course completion:**
Confirmed list of sittings in on classes and teaching as a confirmation of attendance in the required extent of 8 lessons of sitting in on classes and 30 physics lessons taught by student. Lesson records and written preparation for the lessons.

**Learning outcomes:**
Student gains under the guidance of teacher trainer practical teaching skills within the subject of Physics.

**Brief outline of the course:**
Sitting in on classes, teaching physics lessons by student, consulted with teacher trainer, analysis of observed and taught lessons.

**Recommended literature:**
Textbooks for lower and upper secondary school physics

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 33

| abs | n |
|---|---|
| 100.0 | 0.0 |

**Provides:** doc. RNDr. Jozef Hanč, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚBEV/MPPc/15 | **Course name:** Continuous practice teaching I |
| **Course type, scope and the method:**<br>**Course type:** Practice<br>**Recommended course-load (hours):**<br>**Per week: Per study period:** 4t<br>**Course method:** present | |
| **Number of ECTS credits:** 2 | |
| **Recommended semester/trimester of the course:** 3. | |
| **Course level:** II. | |
| **Prerequisities:** ÚBEV/MPPb/15 | |
| **Conditions for course completion:** | |
| **Learning outcomes:** | |
| **Brief outline of the course:** | |
| **Recommended literature:** | |
| **Course language:** | |
| **Notes:** | |

**Course assessment**
Total number of assessed students: 329

| abs | n |
|---|---|
| 100.0 | 0.0 |

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|---|
| **Provides:** |
| **Date of last modification:** 16.12.2021 |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. |

## COURSE INFORMATION LETTER

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|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚBEV/MPPd/15 | **Course name:** Continuous practice teaching II |
| **Course type, scope and the method:**<br>**Course type:** Practice<br>**Recommended course-load (hours):**<br>**Per week: Per study period:** 6t<br>**Course method:** present | |
| **Number of ECTS credits:** 2 | |
| **Recommended semester/trimester of the course:** 4. | |
| **Course level:** II. | |
| **Prerequisities:** ÚBEV/MPPc/15 | |
| **Conditions for course completion:** | |
| **Learning outcomes:** | |
| **Brief outline of the course:** | |
| **Recommended literature:** | |
| **Course language:** | |
| **Notes:** | |

**Course assessment**
Total number of assessed students: 302

| abs | n |
|---|---|
| 100.0 | 0.0 |

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| **Provides:** |
| **Date of last modification:** 16.12.2021 |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. |

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPE/ TTUP/15 | **Course name:** Creating Text Teaching Aids |
|---|---|

**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:** 2.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 278

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 57.55 | 31.29 | 7.91 | 2.52 | 0.72 | 0.0 |

**Provides:** doc. PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Vagaská, PhD.

**Date of last modification:** 12.03.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚBEV/ DNR/06 | **Course name:** Dendrology |

**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:** II.

**Prerequisities:**

**Conditions for course completion:**
1. Attending lectures is optional, participation in exercises is mandatory. 2. During the exercises, it is necessary to master the recognition of selected trees and shrubs in their various phenological phases according to significant identifying features (buds, bark, shape of leaves and flowers, habitus) and some species-specific features (cork wings, thorns, prominent pubescence, distinctive color of shoots in winter, etc.). 3. Within the framework of forest tree seed production, it is necessary to master the identification of fruits and seeds of selected taxa of woody plants.

**Learning outcomes:**

**Brief outline of the course:**
1. Summary of basic terms within the subject Dendrology. 2. Individual variability of woody plants (morphological, biochemical, biological, technical forms). 3. Geographic variability of woody plants (climate type, edaphotype). 4. Individual ecological requirements of woody plants with a basic overview of taxa (woody plants in shade and sunny conditions, oceanic and continental climate). 5. Special communities of woody plants, their characteristics and overview of the most important taxa. Pioneer woody plants, melioration woody plants, woody plants in ravines and scree, forest-steppe woody plants, floodplain woody plants, peatland woody plants and woody plants of upper forest border. 6. Saving the gene pool of forest trees (generative and clone seed orchards, selected trees and stands). 7. Selected chapters from the seed production of forest trees (external and internal factors of seed production, methods of collecting and technology of seed processing and its subsequent storage). 8. Selected chapters from forest tree seed production (seed lifespan, short-term and long-term seed storage, germination ability and germination process, methods of pre-sowing seed preparation). 9. Introduction of woody plants - definition of the term, phases of introduction. Benefits of introduction and possible environmental risks. 10. Invasive trees, overview and characteristics of the most important taxa. Ecological, economic and health consequences of invasions. 11. The most important dendrological objects in Slovakia (Mlyňany Arboretum, Borová hora Arboretum, Kysihýbel Arboretum, Topoľčianky Castle Park). 12. Introduction to arboriculture, protection and care of trees growing outside the forest. The exercises are aimed at practical recognizing the most important coniferous and deciduous both native and introduced trees. During the summer semester, dealing with woody plants in the winter (in a sterile state), the specific characteristics of woody plants (general habitus of the wood, buds, thorns, specific color of the

surface of the branch, pubescence, cork lamellas, etc.). During the growing season, recognizing the shape of the leaves and flowers..

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 83

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 72.29 | 13.25 | 7.23 | 7.23 | 0.0 | 0.0 |

**Provides:** Ing. Peter Kelbel, Dr.

**Date of last modification:** 19.07.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

**COURSE INFORMATION LETTER**

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|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** KPPaPZ/VPU/17 | **Course name:** Developmental Psychology for Teachers |

**Course type, scope and the method:**
**Course type:** Practice
**Recommended course-load (hours):**
**Per week:** 2 **Per study period:** 28
**Course method:** present

**Number of ECTS credits:** 2

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
active participation in seminars - 20%
seminar work according to the current instructions on the electronic bulletin board- 40%
final test - 40%
Detailed and updated information will be posted on the electronic board

**Learning outcomes:**
The graduate will understand the principles of developmental psychology, and will be able to characterize the norm in separate developmental stages with a specific focus on the period of school age and adolescence. As part of the seminar work, a students will process current knowledge published in foreign journals. They will have a knowledge about the current social discourse on the topics covered. The graduate will be able to consider various aspects of the possible influence of parents and friends on the development of piupils and apply the knowledge of developmental psychology in the practice of the teacher.

**Brief outline of the course:**
Determinants and factors of development, cognitive development, personality development. Socialization in separate developmental stages (family, peers, school). Specifics of development in the period of school age, in pubescence and adolescence. Parents and their role in child development. Application of knowledge of developmental psychology in the teacher's practice - communication with students in different developmental stages, creating a teacher-student relationship with respect to the development needs of the student.

**Recommended literature:**
Bačíková a kol. (2023). Keď dieťa potrebuje nielen psychológa. Grada publishing.
Vágnerová, M. Vývojová psychologie. Portál, Praha 2000
Říčan, P. Cesta životem. Portál, Praha, 2004.
Thorová, K. Vývojová psychologie. Portál, Praha, 2015.
Macek, P. Adolescence. Praha: Portál, 2003
Matějček, Z. - rôzne diela
Bačíková, M. Psychológia rodičovskej kontroly, Šafárik Press, Košice 2019

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 135

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 79.26 | 15.56 | 2.96 | 2.22 | 0.0 | 0.0 |

**Provides:** doc. Mgr. Mária Bačíková, PhD.

**Date of last modification:** 03.09.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ DF1/22 | **Course name:** Didactics of Physics 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:** 2.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
semester work:
elaborated online assignments in lms.upjs.sk
analysis of model methodologies
elaboration and presentation of own educational activity
oral examination:
clarification of two topics from subject didactics
clarification of the thematic unit
presentation of model methodology

**Learning outcomes:**
Knowledge and skills in the field of Physics education, overview about the problems of Physics education, basic skills necessary to prepare and quide educational activities, school experiments, problem solving and to use modern media for physics education.

**Brief outline of the course:**
Within the Didactics of Physics subject the core problems of physics education are introduced and case studies of their solving are interpreted. Strategies on design and implementation of educational activities, their evaluation and the use of modern media are introduced and corresponding skills are trained.

**Recommended literature:**
e- version of schoolbook Physics for lower secondary school

**Course language:**
Slovak, English

**Notes:**

**Course assessment**
Total number of assessed students: 35

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 62.86 | 31.43 | 2.86 | 0.0 | 0.0 | 2.86 |

| |
|---|
| **Provides:** doc. RNDr. Marián Kireš, PhD., RNDr. Katarína Kozelková, PhD. |
| **Date of last modification:** 07.09.2021 |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. |

**COURSE INFORMATION LETTER**

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚFV/ DF2/22 | **Course name:** Didactics of Physics 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:** 3.

**Course level:** II.

**Prerequisities:** ÚFV/DF1/22

**Conditions for course completion:**
teaching plan for two lessons 10p
micro teaching activities 20p
educational project 20p
answering questions during the course 10p
end-of course oral examination 40p

**Learning outcomes:**
knowledge and skills in the field of Physics education, overview about the problems of Physics education, basic skills necessary to prepare and quide educational activities, school experiments, problem solving and to use modern media for physics education

**Brief outline of the course:**
1. Didactic methods, forms and tools in physics education
2. Graphs in education
3. Control, evaluation and assessment of students results,
4. Tests
5. Everyday physics and its application in education
6. Computer based measurements:
7. Using of Internet and multimedia in education
8. IBSE
9. Informal activities to support physics education
10. Life long learning, science teacher training
11. 12. Semestral project presentation

**Recommended literature:**
1.J. Janovič a kol.: Didaktika fyziky, MFF UK Bratislava, 1990
2.J. Janovič a kol.: Vybrané kapitoly didaktiky fyziky, MFF UK Bratislava, 1999
3.E. Kašpar a kol.: Didaktika fyziky, SPN Praha, 1978
4.E. Mechlová: Didaktika fyziky 1, 2, PdF Ostrava, 1989
5.J. Fenclová: Úvod do teórie a metodológie didaktiky fyziky, SPN Praha, 1982
6.Vachek, J. a kol.: Fyzika pre 1. ročník gymnázia. SPN, Bratislava, 1984.
7.Svoboda, E. a kol. Fyzika pre 2. ročník gymnázia. SPN, Bratislava, 1985.

8.Lepil, O. a kol.: Fyzika pre 3. ročník gymnázia. SPN, Bratislava, 1986.
9.Pišút, J. a kol.: Fyzika pre 4. ročník gymnázia. SPN, Bratislava, 1987.
10.Scholtz, E., Kireš, M.: Fyzika - Kinematika pre osemročné gymnáziá, SPN, Bratislava, 2001, 104 strán, ISBN 80-08-02848-3
11.Blaško, M., Gajdušek, J., Kireš, M., Onderová, Ľ.: Molekulová fyzika a termodynamika pre osemročné gymnáziá, SPN, Bratislava, 2004, 120 strán, ISBN 80-10-00008-6
12.Scholtz, E., Kireš, M.: Fyzika - Dynamika pre osemročné gymnáziá, SPN, Bratislava, 2007, 231 strán, ISBN 80-10-00013-2
School textbooks for Physics education at upper secondary level

**Course language:**
Slovak, English

**Notes:**

**Course assessment**
Total number of assessed students: 34

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 76.47 | 14.71 | 5.88 | 0.0 | 0.0 | 2.94 |

**Provides:** doc. RNDr. Marián Kireš, PhD., RNDr. Katarína Kozelková, PhD.

**Date of last modification:** 07.09.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ DIB1/03 | **Course name:** Didactics of biology |
|---|---|

**Course type, scope and the method:**
**Course type:** Lecture / Practice
**Recommended course-load (hours):**
**Per week:** 2 / 3 **Per study period:** 28 / 42
**Course method:** present

**Number of ECTS credits:** 6

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

**Course level:** II.

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

**Conditions for course completion:**
It is a profiling subject with compulsory participation in exercises. The activity at the output of the lecture, the developed and continuously submitted solutions to assignments from the exercises and the final project according to the assignment at the beginning of the semester are evaluated. The final exam is oral. The share of the grade from the evaluated activities on the final grade: 10% - Average points for completed assignments (min. 8 points/item) is counted as the value of the grade A for an average of 9-10 b. as B for average 8-9 b. For a lower average value after correction: average 7-8 b. = C, 6-7 b. = D, 5-6 b. = E. 10% - Output at the lecture. 20% - semester project (evaluation is part of the evaluation form). 60% - the result of the final oral exam. Conversion of points to a grade: A 95 - 100 B 85 - 94 C 65 - 84 D 55 - 64 E 50 - 54 FX 0 - 49 The resulting grade is calculated as a weighted average according to the standard value of classification grades A to E.

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

**Brief outline of the course:**
1 Didactics of biology in the system of sciences
2 Domains of biology education
3 Biology standards
4 Curriculum and textbooks in SR
5 Biological sciences
6 Complex of didactic tools of biology
7 Hands-on education as an educational concept
8 Teaching organization forms
9 Lesson preparation
10 Principles of knowledge
11 Formative and summative evaluation in biology
12 Biological educational strategies
13 Teaching aids of biology
14 School garden and the environment corner at school

15 Biological excursion
16 Working with talents and biological competitions for students

**Recommended literature:**

Katarína Kimáková Sprievodca didaktikou biológie, 2022 Šafárik press UPJŠ v Košiciach https://unibook.upjs.sk/img/cms/2022/sprievodca-didaktikou-biologie.pdf
Ganajová, M. a kol. Formatívne hodnotenie vo výučbe prírodných vied, matematiky a informatiky. Košice: Univerzita Pavla Jozefa Šafárika v Košiciach, 2021. ISBN 9788081529733.
Ganajová a kol. Formatívne hodnotenie a jeho implementácia do výučby prírodných vied, matematiky a informatiky. Bratislava: Wolters Kluwer SR, 2022. Školstvo. ISBN 9788057104834.
Samuel Kai Wah Chu · Rebecca B. Reynolds, Nicole J. Tavares · Michele Notari, Celina Wing Yi Lee 21st Century Skills Development Through Inquiry Based Learning From Theory to Practice, Springer 2017 https://link.springer.com/content/pdf/10.1007/978-981-10-2481-8.pdf
Kimáková, K.: Úvod do štúdia didaktiky biológie, elektronický študijný text, 2008
Kireš, M., Ješková, Z., Ganajová, M, Kimáková K.. Bádateľské aktivity v prírodovednom vzdelávaní, ŠPÚ 2016
Periodical publications for teaching biology. Internal study materials in Moodle https://lms.upjs.sk/login/index.php
Existing curriculum standards and biology textbooks for elementary and secondary schools
Fišer, R.: Učíme deti myslet a učit se. Praha: Portál, 2011. 176 s. ISBN 978-80262-0043-7
Gavora, P.: Akí sú moji žiaci. (Pedagogická diagnostika žiaka). Nitra: ENIGMA, 2011. 216 s. ISBN 978-80-89132-91-1
Karnsová, M.: Jak budovat dobrý vztah mezi učitelem a žákem. Praha: Portál, 1995. 151 s. ISBN 80-7178-032-4
Kotrba, T., Lacina, L.: Praktické využití aktivizačných metod ve výuce. Brno: Společnost pro odbornou literaturu, 2007. 188 s. ISBN 978-80-87029-12-1
Kyriacou, Ch.: Klíčové dovednosti učitele. Praha: Portál, 1996. 153 s. ISBN 80-7178-022-7
Petty, G.: Moderní vyučování. Praha: Portál, 2013. 380 s. ISBN 80-7178-070-7
Silberman, M.: 101 Metod pre aktivní výcvik a vyučování. Praha: Portál, 1997. 312 s. ISBN: 80-7178-124-X

**Course language:**
SK, EN

**Notes:**

**Course assessment**
Total number of assessed students: 686

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 53.06 | 29.15 | 14.29 | 3.35 | 0.15 | 0.0 |

**Provides:** PaedDr. Andrea Lešková, PhD., RNDr. Anna Mišianiková, PhD., Mgr. Zuzana Boberová, PhD.

**Date of last modification:** 12.02.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ DDP1/22 | **Course name:** Diploma Project I |
|---|---|

**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:** 1.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
regular consultations with diploma thesis supervisor about the progress of diploma project development, design of investigation plan

**Learning outcomes:**
Student has studied the theoretical background, formulates research questions, has designed investigation plan, has presented first results, eventually.

**Brief outline of the course:**
Development of diploma project

**Recommended literature:**
Recommended literature that is included in the diploma thesis assignments
Regulations for diploma thesis preparation
template for diploma thesis

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 3

| abs | n |
|---|---|
| 66.67 | 33.33 |

**Provides:**

**Date of last modification:** 15.02.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ DDP2/22 | **Course name:** Diploma Project II |
|---|---|

**Course type, scope and the method:**
**Course type:**
**Recommended course-load (hours):**
**Per week: Per study period:**
**Course method:** present

**Number of ECTS credits:** 3

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
regular consultaions with diploma thesis supervisor about the progress of diploma project development and about the investigation
regular consultations
study of available resources connected with the diploma thesis assignments
first results

**Learning outcomes:**
Student understands the methods of investigation and he gains first results.

**Brief outline of the course:**
Work on the diploma project with regard to the assignemnts of the diploma thesis

**Recommended literature:**
Recommended literature that is included in the diploma thesis assignments
Regulations for diploma thesis preparation
template for diploma thesis

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 3

| abs | n |
|---|---|
| 66.67 | 33.33 |

**Provides:**

**Date of last modification:** 15.02.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ DPP2/22 | **Course name:** Diploma Project II |
|---|---|

**Course type, scope and the method:**
**Course type:**
**Recommended course-load (hours):**
**Per week: Per study period:**
**Course method:** present

**Number of ECTS credits:** 3

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Regular acquaintance of the supervisor with the research process, regular consultations, study of the literature on the topic, first results and, if necessary, modification of the project.

**Learning outcomes:**
The student practically manages the necessary methodology and obtained the first results. He reports on them at the seminar of the department, where the assignment of the diploma thesis is announced.

**Brief outline of the course:**
Data collection to verify hypotheses, study of current literature.

**Recommended literature:**
Recommended professional literature on a specific topic of the diploma thesis is a part of the diploma thesis assignment. Methodological guideline 14/2009-R of 27 August 2009 on the requisites of final theses, their bibliographic registration, control of originality, storage and access, including annexes; Decree of the Ministry of Education of the Slovak Republic of 15 March 2010 no. MŠSR-5 / 2010-071 on the model of the cover and title page of the final, rigorous and habilitation thesis and the format of the exchange of data on the final, rigorous and habilitation thesis; Directive no. 1/2011 on the basic requirements of final theses, rigorous theses and habilitation theses, their publication and making available during their preservation and control of originality valid for Pavel Jozef Šafárik University in Košice and its components; Supplement no. 1 and no. 2 to Directive no. 1/2011 Template for the creation of ZP in dot and dotx format on the CRZP website (Central Register of Final Theses)

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 33

| abs | n |
|---|---|
| 100.0 | 0.0 |

| |
|---|
| **Provides:** |
| **Date of last modification:** 13.05.2022 |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. |

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ DDP3/22 | **Course name:** Diploma Project III |
|---|---|

**Course type, scope and the method:**
**Course type:**
**Recommended course-load (hours):**
**Per week: Per study period:**
**Course method:** present

**Number of ECTS credits:** 3

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
regular consultations with diploma thesis supervisor about the progress of diploma project development and about the project results

**Learning outcomes:**
Student has enough knowledge to prepare a theoretical part of the diploma thesis and for practical part based on the problem analysis and drawing conclusions.

**Brief outline of the course:**
Work on the project with regard to the diploma thesis assignments

**Recommended literature:**
Recommended literature that is included in the diploma thesis assignments
Regulations for diploma thesis preparation
template for diploma thesis

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 5

| abs | n |
|---|---|
| 100.0 | 0.0 |

**Provides:**

**Date of last modification:** 15.02.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚBEV/ DPP3/22 | **Course name:** Diploma Project III |
| **Course type, scope and the method:**<br>**Course type:**<br>**Recommended course-load (hours):**<br>**Per week: Per study period:**<br>**Course method:** present | |
| **Number of ECTS credits:** 3 | |
| **Recommended semester/trimester of the course:** 3. | |
| **Course level:** II. | |
| **Prerequisities:** | |
| **Conditions for course completion:**<br>Regular consultations on the progress and results of the project with the thesis supervisor. Presentation at a seminar on a diploma project with preliminary results. | |
| **Learning outcomes:**<br>The student processed the obtained data and / or verified the created methodological materials or aids. He has the data to process the theoretical part of his thesis and to confirm / refute hypotheses and formulate conclusions. He begins to formulate the text of his diploma thesis and continues to monitor new relevant information. | |
| **Brief outline of the course:**<br>Processing and interpretation of results. | |
| **Recommended literature:**<br>Recommended professional literature on a specific topic of the diploma thesis is a part of the diploma thesis assignment. Methodological guideline 14/2009-R of 27 August 2009 on the requisites of final theses, their bibliographic registration, control of originality, storage and access, including annexes; Decree of the Ministry of Education of the Slovak Republic of 15 March 2010 no. MŠSR-5 / 2010-071 on the model of the cover and title page of the final, rigorous and habilitation thesis and the format of the exchange of data on the final, rigorous and habilitation thesis; Directive no. 1/2011 on the basic requirements of final theses, rigorous theses and habilitation theses, their publication and making available during their preservation and control of originality valid for Pavel Jozef Šafárik University in Košice and its components; Supplement no. 1 and no. 2 to Directive no. 1/2011 Template for the creation of ZP in dot and dotx format on the CRZP website (Central Register of Final Theses) | |
| **Course language:**<br>SK, EN | |
| **Notes:** | |

**Course assessment**
Total number of assessed students: 53

| abs | n |
|---|---|
| 100.0 | 0.0 |

**Provides:**

**Date of last modification:** 13.05.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/DPOU/22 | **Course name:** Diploma 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:** 14

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Preparation and submission of diploma thesis in printed and electronic form.
Presentation of diploma thesis results and its defence in front of examination board.

**Learning outcomes:**
Knowledge and skills connected with selected problem analysis and presentation of diploma thesis results in front of experts.

**Brief outline of the course:**
Preparation and submission of diploma thesis to central registration system.
Printed version for reviewing.
Presentation of diploma thesis results and answers to the questions of reviewrs.
Discussion on the content of diploma thesis and answers to the questions of examination board members.

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 5

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 80.0 | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 |

**Provides:**

**Date of last modification:** 15.02.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ODP/22 | **Course name:** Diploma Thesis and its Defense |
|---|---|

**Course type, scope and the method:**
**Course type:**
**Recommended course-load (hours):**
**Per week: Per study period:**
**Course method:** present

**Number of ECTS credits:** 14

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

**Course level:** II.

**Prerequisities:** ÚBEV/DPP3/22

**Conditions for course completion:**
The diploma thesis is the result of the student's own creative work. It must not show elements of academic fraud and must meet the criteria of good research practice defined in the Rector's Decision no. 21/2021, which lays down the rules for assessing plagiarism at Pavel Jozef Šafárik University in Košice and its components. Fulfillment of the criteria is verified mainly in the training process and in the process of job defense. Failure to do so is grounds for disciplinary action.

**Learning outcomes:**
With the diploma thesis the student demonstrates mastery of extended theory and professional terminology of the field of study, acquisition of knowledge, skills and competences in accordance with the declared profile of the graduate of the study program, as well as the ability to apply them in an original way. The student demonstrates the ability of independent professional work in terms of content, formal and ethical. Further details of the diploma thesis are determined by Directive no. 1/2011 on the basic requirements of final theses and the Study Regulations of UPJŠ in Košice for the 1st, 2nd and joint 1st and 2nd degree.

**Brief outline of the course:**
Preparation and submission of the diploma thesis to the CRZP.
Submission of the printed version to the opponent.
Presentation of work results and answers to opponents' questions.
Qualified discussion on the topic with the commission for master's state final exams.

**Recommended literature:**
Listed in the approved thesis assignment.

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 40

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 65.0 | 15.0 | 7.5 | 5.0 | 2.5 | 5.0 |

| |
|---|
| **Provides:** |
| **Date of last modification:** 13.05.2022 |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. |

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ DPP1/22 | **Course name:** Diploma project I |
|---|---|

**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:** 1.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Regular acquaintance of the supervisor with the progress on the agreed tasks. Submission of a research plan. Active participation in seminars organized for diploma projects implemented at departments, where the topic of the project and the assignment of the diploma thesis are listed.

**Learning outcomes:**
The student has mastered the theoretical preparation for the assigned topic, formulates research questions and has a research plan, or the first preliminary results. The student can also implement the diploma project at a workplace outside the UPJŠ under the guidance of an expert from practice, on a topic listed at APU ÚBEV PF UPJŠ in Košice. He also has a job consultant at ÚBEV, he is skilled in communication with experts in electronic and face-to-face form.

**Brief outline of the course:**
Hypothesis formulation, study of literature, preparation of materials for hypothesis testing.

**Recommended literature:**
Recommended professional literature on a specific topic of the diploma thesis is a part of the diploma thesis assignment. Methodological guideline 14/2009-R of 27 August 2009 on the requisites of final theses, their bibliographic registration, control of originality, storage and access, including annexes; Decree of the Ministry of Education of the Slovak Republic of 15 March 2010 no. MŠSR-5 / 2010-071 on the model of the cover and title page of the final, rigorous and habilitation thesis and the format of the exchange of data on the final, rigorous and habilitation thesis; Directive no. 1/2011 on the basic requirements of final theses, rigorous theses and habilitation theses, their publication and making available during their preservation and control of originality valid for Pavel Jozef Šafárik University in Košice and its components; Supplement no. 1 and no. 2 to Directive no. 1/2011 Template for the creation of ZP in dot and dotx format on the CRZP website (Central Register of Final Theses)

**Course language:**

**Notes:**
SK, EN

| **Course assessment**<br>Total number of assessed students: 44 | |
|---|---|
| abs | n |
| 100.0 | 0.0 |
| **Provides:** | |
| **Date of last modification:** 13.05.2022 | |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. | |

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPPaPZ/PUDU/15 | **Course name:** Drug Addiction Prevention in Educational Practice |
|---|---|

**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., 3.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
1st part of the semester evaluation: active participation in the training part (30p). 2nd part of the semester evaluation: active participation in workshops (20p) 3rd part of the semester evaluation - preparation (10p) and implementation (10p) of block activities (20p, minimum 11 points). 4th part of the evaluation - written knowledge exam (20p, minimum 11 points). In total, students can get 90p and the final grade is as follows: 90 - 82: A 81 - 73: B 72 - 66: C 65 - 59: D 58 - 54: E 53 and less: FX. Detailed information in the electronic bulletin board of the course in AIS2. The teaching of the subject will be realized by a combined method.

**Learning outcomes:**
The student understands principals of research data based prevention of risk behavior, can describe and explain the determinants of risk behavior as well as protective and risk factors for substance use. Understands and adequately interprets the theory explaining the background of substance and non-substance addictions.
The student is also able to state and classify the types and forms of prevention, strategies and approaches in prevention, can distinguish effective strategies from ineffective ones.
The student is able to apply the learned rules, procedures and competencies for the work of a teacher in the field of drug use prevention, as well as the acquired professional skills for the work of a teacher and prevention coordinator at school.

**Brief outline of the course:**
Psychological, pedagogical-psychological, medical and legal-forensic aspects of substance use prevention
Prevention of substance use based on risk and resilience
Primary, secondary and tertiary prevention of substance use
Universal, selective and indicated prevention of substance use
Effective substance prevention strategies based on research data
Preparation and implementation of components of effective substance use prevention programs

**Recommended literature:**
Orosová, O. a kol. (2012). Základy prevencie užívania drog a problematického používania internetu v školskej praxi. Košice: UPJŠ.

Sloboda, Z., & Bukoski, J. (Eds.). (2006). Handbook of Drug Abuse Prevention: Theory, Science, and Practice. New York: Springer.
National and international scientific journals.

**Course language:**
slovak

**Notes:**

**Course assessment**
Total number of assessed students: 430

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 51.16 | 41.16 | 6.98 | 0.7 | 0.0 | 0.0 |

**Provides:** prof. PhDr. Oľga Orosová, CSc., Mgr. Janka Liptáková, PhDr. Anna Janovská, PhD., Mgr. Zuzana Michalove

**Date of last modification:** 24.06.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPPaPZ/VP/09 | **Course name:** Educational Counselling |
|---|---|

**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:** 2.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 262

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 76.72 | 14.5 | 5.73 | 2.29 | 0.76 | 0.0 |

**Provides:** PhDr. Anna Janovská, PhD.

**Date of last modification:** 30.01.2025

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPE/ ZSP/15 | **Course name:** Essentials of Special Education |
|---|---|

**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.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 805

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 52.42 | 24.35 | 12.3 | 6.58 | 3.6 | 0.75 |

**Provides:** PaedDr. Michal Novocký, PhD., doc. PaedDr. Renáta Orosová, PhD.

**Date of last modification:** 14.09.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ETO1/03 | **Course name:** Ethology |
|---|---|

**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., 3.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Fulfilled conditions for the exercises
Successfully completed oral exam

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

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

**Recommended literature:**
Franck, D.: Verhaltensbiologie. Einfuhrung in die Ethologie. Georg Thieme-Verlag, 1993
Manning, A., Dawkins, M. S.: An introduction to animal behaviour. Cambridge University Press, 1992
DRICKMER, L.C., VESSEY, S.H., MEIKLE, D. Animal Behavior: mechanisms, ecology, evolution. 4th ed. Dubuque : Wm. C. Brown Publishers, 1996.
Internet

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 1131

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 43.32 | 24.31 | 22.81 | 7.87 | 1.59 | 0.09 |

**Provides:** RNDr. Igor Majláth, PhD., RNDr. Natália Pipová, PhD.

**Date of last modification:** 22.09.2023

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ EB1/99 | **Course name:** Evolutionary Biology |
|---|---|

**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:** 3.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
In the written exam, the student must demonstrate, in addition to knowledge in the field of evolutionary biology, knowledge of analytical and synthetic thinking when solving the answers to problem-formulated questions, while using knowledge from the entire bachelor's and master's studies of his field.

**Learning outcomes:**
Graduates of the course will gain an overview of evolutionary theories in the past and today, and based on the most modern scientific knowledge about macro- and microevolutionary processes in living nature at various levels of investigation and knowledge, they should be able to analytically solve scientific, but also philosophical questions in the field of evolutionary theory. He is able to argue and critically evaluate different views on evolution and apply his knowledge in different types of work tasks not only in an academic environment, but also in practice, e.g. in agriculture, ecology, environmental protection and the like.

**Brief outline of the course:**
1. Introduction to evolutionary biology. Historical development of ideas about the evolution of life. Evidence of the theory of evolution.
2. The origin and evolution of the first forms of life on Earth.
3. Theory of natural selection.
4. Molecular evolution I: Evolutionary processes at the gene level. Molecular evolution.
5. Molecular evolution II: Evolutionary processes at the level of species and populations.
6. Molecular evolution III: Evolution of genetic systems.
7. Reproductive strategies of plants, sexuality, asexuality and evolution.
8. Macroevolution and microevolution. Types of speciation. Evolutionary trends of green plants.
9. Extinction - a sad but natural part of evolution.
10. Overview of animal evolution.
11. Origin and development of man I.
12. Origin and development of man II.

**Recommended literature:**
Mayr, E.: Co je evoluce. Aktuální pohled na evoluční biologii. Academia Praha, 2009.
Flegr, J.: Evoluční biologie. Academia Praha 2005

Kejnovský, E., Hobza, R.: Evoluční genomika. (http://www.evolucnigenomika.cz/Skripta/Evolucni%20genomika%20skripta%202008.pdf) 2009
Futuyma, D.J.: Evolution. Sinauer Associates, Sunderland, 2005.
Briggs D., Walters S. M.: Proměnlivost a evoluce rostlin. Univerzita Palackého, Olomouc, 2001.
Dobzhansky T. et al.: Evolution. San Francisco 1977.
E.J.Larson : Evolúcia. Neobyčajná história jednej vedeckej teórie. Slovart, 2006.

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 675

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 12.0 | 22.22 | 25.33 | 24.0 | 14.96 | 1.48 |

**Provides:** prof. RNDr. Pavol Mártonfi, PhD., prof. RNDr. Ľubomír Kováč, CSc., RNDr. Linda Petijová, PhD., Priv.-Doz. Souvik Kusari, Dr. rer. nat., univerzitný profesor

**Date of last modification:** 24.07.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPE/ ZZP/12 | **Course name:** Experiential Education |
|---|---|

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

**Number of ECTS credits:** 4

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 451

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 41.46 | 38.58 | 14.63 | 4.21 | 0.89 | 0.22 |

**Provides:** doc. PaedDr. Renáta Orosová, PhD., Mgr. Beáta Sakalová, PhD.

**Date of last modification:** 14.09.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ VMK/22 | **Course name:** General Microbiology |
|---|---|

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

**Number of ECTS credits:** 4

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Attendance of practicals (at least 90%), 2 written examinations during semester, final oral examination

**Learning outcomes:**
Students will obtain 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.

**Brief outline of the course:**
Viruses, prokaryotic and eukaryotic microorganisms, their cytology, physiology, genetics, ecology, classification. The importance of microorganisms for humans and environment.

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 263

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 63.12 | 21.29 | 11.03 | 3.8 | 0.76 | 0.0 |

**Provides:** doc. RNDr. Peter Pristaš, CSc., univerzitný profesor, RNDr. Mariana Kolesárová, PhD., RNDr. Ivana Slepáková, PhD.

**Date of last modification:** 16.12.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚGE/ GEOB/22 | **Course name:** Geology |
|---|---|

**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:** 6

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 329

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 26.75 | 34.35 | 27.05 | 9.12 | 2.74 | 0.0 |

**Provides:** doc. Ing. Katarína Bónová, PhD., Mgr. Anton Uhrin

**Date of last modification:** 30.10.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/DGO/17 | **Course name:** Geology and nature protection 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:** 3.

**Course level:** II.

**Prerequisities:** ÚBEV/DIB1/03

**Conditions for course completion:**
Active participation in exercises. The preparation and presentation of a self-planned school experiment and its didactic commentary at the end of the course are evaluated.

**Learning outcomes:**
Graduates of the course will gain practical experience with the implementation of school experiments and modeling of geological processes and phenomena. At the same time, they will learn the procedures of student research focused on the issue of environmental components and the need for nature protection using digital technologies.
Graduates will be able to choose a suitable form for the interpretation of geological and ecological curriculum and
methods

**Brief outline of the course:**
Components of the environment in SEP - Specifics of didactics of geology - Environmental education in biology as part of a cross-cutting theme - Elaboration of thematic units focused on the inanimate
nature and ecology in biology textbooks - Motivation of students to protect nature - Research topics for students' work - Modeling of phenomena and processes in the environment - Active involvement pupils in nature protection - Pupils' environmental projects - Educational walks and excursions

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 29

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

**Provides:** PaedDr. Andrea Lešková, PhD., RNDr. Anna Mišianiková, PhD.

| |
|---|
| **Date of last modification:** 05.04.2023 |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. |

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPPaPZ/PsZ/15 | **Course name:** Health Psychology |
|---|---|

**Course type, scope and the method:**
**Course type:** Practice
**Recommended course-load (hours):**
**Per week:** 2 **Per study period:** 28
**Course method:** present

**Number of ECTS credits:** 2

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Assessment Conditions:
Active participation in seminars (25%) – a maximum of 2 absences is allowed.
Preparation and presentation of a seminar paper on a topic assigned during the seminar, within the agreed timeframe (25%).
Final paper and its ongoing presentation (50%).
Final Grading Scale:
A: 100 – 90%
B: 89 – 80%
C: 79 – 70%
D: 69 – 60%
E: 59 – 50%
FX: 49% or less – failed and the work must be revised.

**Learning outcomes:**
Knowledge: Students will gain basic knowledge of health psychology, including factors that promote health and those contributing to the development of illnesses. They will learn to formulate the basic theses of health psychology, explain its concepts, and understand the principles of the bio-psycho-social model of health. They will expand their understanding of the applications of health psychology in working with individuals and groups, including in school settings.
Skills: Students will develop the ability to prepare a basic preventive program focused on promoting a healthy lifestyle and managing stress. They will learn to implement acquired knowledge in practice, including working with children and youth in school environments.
Competencies: Graduates will be able to effectively participate in the creation and implementation of preventive programs that support health and mental well-being. They will know how to apply psychological knowledge when working with students in school settings, contributing to the improvement of both mental and physical health of individuals and society.

**Brief outline of the course:**
1. Health psychology. Definition of health. Bio-psycho-social model of health.
2. Mental health and quality of life, well being.
3. Physiological aspects of mental health, lifestyle

4. Stress. Coping, resilience.
5. Psychosomatic diseases, placebo.
6. Social support and its importance for health.
7. Burnout syndrome.
8. The meaning of life, faith.
9. Health-related behavior and prevention. Risky behavior, excessive use of the Internet and screens.
10. Socio-economic inequalities in health. Unemployment and health.

**Recommended literature:**

Křivohlavý, J. (2001). Psychologie zdraví. Praha: Portál.
Kebza, V. (2005). Psychosociální determinanty zdraví. Praha: Academia.
Křivohlavý, J. (2002). Psychologie nemoci. Praha: Grada.
Sarafino, E. P. (2007). Health psychology: Biopsychosocial interactions. John Wiley & Sons.
Taylor, E. (2006). Health psychology. Singapore: McGraw-Hill.
Vollrath, M. E. (2006). Handbook of personality and health. Chichester: John Wiley & Sons.
Marks, D. F., Murray, M., Estacio, E. V., & others. (2024). Health psychology: Theory, research and practice (7th ed.). SAGE Publications Ltd
Mareš, J., & Kebza, V. (2024). Psychologie zdraví. Grada.

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 149

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

**Provides:** doc. Mgr. Gabriel Baník, PhD.

**Date of last modification:** 04.02.2025

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/SBD/08 | **Course name:** History of Biology Seminar |
|---|---|

**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:** 1.

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

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**
Introduction to history of science, especially biology

**Brief outline of the course:**
Introduction to history of biology (and related scientific areas) from ancient times, through middle ages to present.

**Recommended literature:**
Magner, L.N. (2002) A history of the life sciences. Marcel Dekker, Inc.

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 508

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 97.64 | 2.17 | 0.2 | 0.0 | 0.0 | 0.0 |

**Provides:** prof. RNDr. Martin Bačkor, DrSc.

**Date of last modification:** 03.05.2015

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ IMU1/03 | **Course name:** Immunology |
|---|---|

**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:** 1.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Recognition.
Oral examination.

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

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

**Recommended literature:**
Janeway Ch. A., Travers P., Walport M., Schlomchik M.: Immunobiology. Garland Science, 2004
Murphy, K. (2012): Jeneway's Immunobiology. 8th ed. Garland Science
Delves, P.J. et al. (2011): Roitt's essential immunology 12th ed Wiley-Blackwell

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 1087

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 40.02 | 23.83 | 23.64 | 6.99 | 1.93 | 3.59 |

**Provides:** RNDr. Vlasta Demečková, PhD., univerzitná docentka

**Date of last modification:** 22.09.2023

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/IB/22 | **Course name:** Informatics in Biology |
|---|---|

**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:** II.

**Prerequisities:**

**Conditions for course completion:**
Elaboration of an evaluated assignment for each of the three thematic units: image analysis, modeling, databases.

**Learning outcomes:**
The graduate of the course will be ready to teach the optional course Informatics in Natural Sciences and Mathematics at the secondary school.

**Brief outline of the course:**
Imaging methods in biology (analysis of digital image of biological objects, detection of the number of particles (eg blood cells), measurement of lengths and areas, processing of acquired data)
Modeling (coaching modeling and working with ready-made Python programs: spread of infection, impact of vaccination, cell culture growth, tumor growth, forest development, predator prey relationship)
Biological databases (working with big data, data filtering, animal migration monitoring, species identification applications)

**Recommended literature:**
Kimáková, K. Mišianiková, A. Andrejková G.: Informatika v prírodných vedách a matematike, Zošit biológia, Centrum vedecko-technických informácií SR, Bratislava 2020, ISBN: 978-80-89965-72-4
EAN: 9788089965724

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 18

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

**Provides:** RNDr. Anna Mišianiková, PhD.

**Date of last modification:** 13.05.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

**COURSE INFORMATION LETTER**

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** KPPaPZ/UPN/17 | **Course name:** Introduction into Psychology of Religion |

**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:** 2.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
The assessment is based on the interim evaluation. The subject will be taught in both present and distance format. Up-to-date information concerning the subject for the given academic year can be found on the electronic board of the subject in the Academic Information System (AIS) of the UPJŠ.

**Learning outcomes:**
The student wil acquire a basic overview of the origin and current state of knowledge in the field of research and application the psychology of religion. He/she will be able to described, explaine, and evaluate this knowlege. The student will be able to apply the acquired knowledge in the basic orientation in the field, and develop critical thinking and will be able to apply and integrate already acquired knowledge from other (psychological) distributions

**Brief outline of the course:**
1. History of psychology of religion in national and world context
2. Psychological perspective on religion and religious experience
3. Psychology of religion in an interdisciplinary context
4. Basic approaches to psychological interpretation and selected views
5. Different types of religious experience
6. Psychological view of religion from a biodromal perspective
7. Spirituality versus religiosity in a postmodern society
8. Coping in the context of religiosity
9. Psychotherapy and religion, pastoral psychology

**Recommended literature:**
Eliade, M. (1994). Posvátné a profánní. Praha: Česká křesťanská akademie.
Eliade, M. (1995). Dějiny náboženského myšlení 1. Praha: Oikoymenh.
Freud, S. (1999). Nutkavá jednání a náboženské úkony. In Freud, S., Spisy z let 1906–1909. Praha: Psychoanalytické nakladatelství.
Fromm, E. (2003). Psychoanalýza a náboženství. Praha: Aurora
Erikson, E. (1996). Mladý muž Luther: studie psychoanalytická a historická. Praha: Psychoanalytické nakladatelství.
James, W. (1930). Druhy náboženské zkušenosti. Praha: Melantrich.
Jung, C. G. (1993). Analytická psychologie: Její teorie a praxe. Praha: Academia.

Křivohlavý, J. (2000). Pastorální péče. Praha: Oliva
Pargament, K. (1997), Psychology of religion and coping,
Říčan, P. (2007). Psychologie náboženství a spirituality. Praha: Portál.
Říčan P. (2002), Psychologie náboženství, Portál, Praha,
Stríženec, M. (2001) Súčasná psychológia náboženstva

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 87

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

**Provides:** Mgr. Jozef Benka, PhD.

**Date of last modification:** 21.02.2025

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ VEK1/03 | **Course name:** Introduction to Ecology |
|---|---|

**Course type, scope and the method:**
**Course type:** Lecture
**Recommended course-load (hours):**
**Per week:** 3 **Per study period:** 42
**Course method:** present

**Number of ECTS credits:** 3

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

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

**Prerequisities:**

**Conditions for course completion:**
oral examination

**Learning outcomes:**
Fundamental parameters and relations in ecological science. Abiotic, biotic and anthropogenic factors in air, aquatic and terrestrial/soil environment. Autecology, Demecology and Synecology. Ecosystem and Nature Protection.

**Brief outline of the course:**
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.
1. Basic ecological terms. 2. Characterisation of the basic ecological factors (light, temperature, water). 3. Air environment (composition of atmosphere, physical and chemical factors, air pollutants, organisms and their adaptations in air environment). 4. Aquatic environment (water properties physical and chemical factors, gases in water, water pollutants, eutrophication and saprobity, aquatic organisms). 5. Soil environment (physical and chemical properties, soil profile, humus layer, soil pollutants, soil organisms and their adaptations). 6. Characterization of Populations, structure and ppuatin dynamics. 7.Biocenoses and biotops. 8. Qualitative and quantitative community characteristics. 9. Ecosystems. 10. Biomes and their characteristics, 11. Bidiversity-factors affecting biodiversity, Species-Area relationships. 12. Biodiversity protection.13. Biospheric cycles.

**Recommended literature:**
Begon, M., Harper, J. L., Townsend, C. L.: Ecology: individuals, populations, and communities. Blackwell Sci. Publ., 1990

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 1871

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 21.65 | 17.42 | 24.85 | 17.1 | 11.65 | 7.32 |

**Provides:** RNDr. Natália Raschmanová, PhD., univerzitná docentka

**Date of last modification:** 16.03.2023

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPPaPZ/ZMPPV/15 | **Course name:** Introduction to Research Methodoly in Education and Psychology |
|---|---|

**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:** II.

**Prerequisities:** KPE/PDU/15 and KPPaPZ/PPgU/15

**Conditions for course completion:**
- active participation in seminars, presentation of assignments in groups, final exam

**Learning outcomes:**
The graduate of the course will gain information about the research methodology, will understand the basic methods of pedagogical and psychological research that can be used in the practice of the teacher. Within the seminars, students will develop professional skills through their own demonstration of a specific research method. The graduate of the course will be able to carry out simple scientific research, present the results of research and read the results of the latest research in the field of pedagogy and psychology.

**Brief outline of the course:**
Research in pedagogy and psychology. Scientific research, scientific thinking. Parts of a research project. Research planning. Topic selection, research problem formulation. Types of research plans. Hypothesis, variables, operationalization. Ethical issues of scientific research. Experiment (experiment problems, control of variables in the experiment). Experimental plans, quasi-experiment. Reliability and validity of research. Research sample, methods of sample selection. Data collection techniques - questionnaire, interview, sociometry, semantic differential, observation, tests. Introduction to qualitative methodology. Possibilities of quantitative data processing. How to write a scientific article, presentation, poster, qualification work. Interpretation of findings, integration of findings into context.

**Recommended literature:**
Bačíková, M., Janovská, A., Orosová, O. Základy metodológie pedagogicko-psychologického výskumu. 2.doplnené vydanie. Šafárik Press, 2019. dostupné online: https://unibook.upjs.sk/img/cms/2019/FF/zaklady-metodologie-ped-psych-vyskumu-2-vyd-web.pdf
Gavora, P.: Úvod do pedagogického výskumu. Bratislava, UK 1999.
Švec, Š. a kol.: Metodológia vied o výchove. Bratislava, Iris 1998. Turek, I.: K základom pedagogického výskumu. Prešov, KPÚ 1991.
Ferjenčík, J.: Úvod do metodológie psychologického výskumu. Praha, Portál 2000.
http://www.e-metodologia.fedu.uniba.sk/

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 825

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 19.27 | 28.48 | 24.61 | 19.03 | 8.48 | 0.12 |

**Provides:** doc. Mgr. Mária Bačíková, PhD., PhDr. Anna Janovská, PhD.

**Date of last modification:** 24.06.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ BIL/19 | **Course name:** Lichen Biology |
|---|---|

**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:** II.

**Prerequisities:**

**Conditions for course completion:**
1. 100% participation of exercises.
2. learn how to work with the key for determining lichens, practical use
3. show and demonstrate the knowledge acquired during the exercises in TLC, HPLC, NMR
4. be able to assemble the equipment necessary for the isolation of substances (e.g. secondary metabolites)
5. demonstrate theoretical knowledge in the field of lichenology in the form of an oral exam

**Learning outcomes:**
After successfully completing the subject, the student should be able to use the key for identification of lower plants - lichens, understand and better understand the meaning of symbioses and thus specifically lichenism, understand the meaning of photobiont and mycobiont, be able to distinguish lichen from other lower plants in nature. The student should understand the significance of the secondary metabolites of lichens, how they are formed and how they are used in practice. As part of the practical part, methods for the isolation and identification of secondary metabolites such as spot-test, TLC, HPLC should be mastered. These methods are connected with basic knowledge of chemistry such as calculations, dilutions, preparation of solutions.

**Brief outline of the course:**
1. introduction to the study of lichenology and concepts
2. history from antiquity to the present
3. Symbiosis and lichenism
4. the role of photobiont and mycobiont in lichenism
5. Lichen thallus, types and subtypes
6. reproduction and reproduction
7. secondary metabolism of lichens and biosynthetic pathways
8. biological and ecological role of lichens and their secondary metabolites
9. extraction of secondary metabolites of lichens
10. Methods for identification and separation of secondary metabolites: TLC (thin layer chromatography), column chromatography
11. Methods for identification: HPLC (high-performance liquid chromatography)
12. Methods for identification: NMR (nuclear magnetic resonance)

13. presentation of results from the practical part

**Recommended literature:**
recommended literature:
Purvis: Lichens (2000)
Ahmadjian The lichens (1973)
Nash: Lichen Biology (2008)
Ranković: Lichen secondary metabolites (2019)

**Course language:**
slovak, english

**Notes:**

**Course assessment**
Total number of assessed students: 21

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 95.24 | 0.0 | 4.76 | 0.0 | 0.0 | 0.0 |

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

**Date of last modification:** 31.07.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

**COURSE INFORMATION LETTER**

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚFV/ MDT/19 | **Course name:** Modern Didactical Technology |

**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:** 2.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Summary evaluation based on ongoing assessment:
1. Active participation at the seminars (in the contact or online form) with minimum 80% participation.
2. Practical ongoing assignments (10) and their defense. At least 50% must be obtained from each assignment elaborated according to assessment criteria.

**Learning outcomes:**
Student graduated from subject will be able:
- recognize current available digital tools and their parameters for educational activities,
- to use all types of actual digital tools in education of science or humanities,
- to design and realize educational activities by using the modern technologies.

**Brief outline of the course:**
00. Introduction - goals and didactic principles
01. Modern hybrid classroom in 21st century
02. Digital learning spaces in 21st century
03. Cloud repositories, services, modern web-browser
04. Cloud editors for notes, texts, spreadsheets and presentations
05. Digital text (scan, OCR, voice recognition, Kami pdf)
06. Digital image and audio (digital recording and editing)
07. Interactive E-voting and videoconference systems in education
08. Digital collaborative technologies (social e-reader, collaborative whiteboard)
09. Virtual and digitally based experiments, digital databases
10. Education video (digital recording and editing)
11. Smartphone and tablet in classic and blended education
12. Teaching tools and digital teacher's workspace

**Recommended literature:**
1. Kireš, M. et al.: Modern didactical technics in teacher practice (in Slovak), Košice: Elfa, 2010
2 . Redecker, C., & Punie, Y. (2017). European Framework for the Digital Competence of Educators: DigCompEdu. Luxembourg: Publications Office of the European Union.

3. C. R. Tucker, T. Wycoff, J. T. Green, Blended Learning in Action: A Practical Guide Toward Sustainable Change. Thousand Oaks: Corwin Press, 2016.
4. D. Bannister, Guidelines on Exploring and Adapting: LEARNING SPACES IN SCHOOLS. Brussels: European Schoolnet, 2017.
5. current information from web sites related to didactical technologies,
catalogues of teaching tools,
current articles about modern trends in science and humanities education.

**Course language:**
Slovak, English

**Notes:**

**Course assessment**
Total number of assessed students: 121

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 56.2 | 27.27 | 12.4 | 2.48 | 1.65 | 0.0 |

**Provides:** doc. RNDr. Jozef Hanč, PhD.

**Date of last modification:** 07.07.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚFV/ MFDF/15 | **Course name:** Modern Physics from Didactics Point of View |

**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:** 3

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Summary evaluation based on ongoing assessment:
1. Practical ongoing assignments (at least 50% needed)
3. Active participation during face-to-face contact learning in classical or virtual classroom (3 absences allowed) and during online learning (no absence, uploading all ongoing assignments)

**Learning outcomes:**
Student should
1. Achieve better conceptual understanding and an integrated view on fundamental ideas of contemprorary modern physics, which every future physicist and physics teacher should have. (Emphasis is not on abstract mathematical methods, but on using most recent knowledge and tools of Physics Education Research - computer modeling of physical phenomena and employing only elementary algebra and calculus.)
2. Get physical intuition and experience dealing with practical applications of modern physics.

**Brief outline of the course:**
01.-05. Fundamental ideas of modern mechanics: scales, symmetry, event, worldlline, spacetime diagram, principle of least action, conservation laws; practical applications.
06.-09. Fundamental ideas of relativity: principle of relativity, space-time interval, conservation of momenergy, metrics, principle of maximal aging; practical applications.
10.-13. Fundamental ideas of quantum mechanics: probability amplitude, principle of democracy of histories, rules for amplitudes, propagator, Schrödinger's equation, stationary state, Feynman's diagrams; practical applications.

**Recommended literature:**
1. Moore, T. A, Six Ideas That Shaped Physics - Unit C, Unit Q, Unit R, 3trd ed., Mc Graw Hill, Boston, 2017
2. Feynman, R.P., QED - The Strange theory of Light and Matter, Princeton University Press, Princeton, 1985
3. Hey, A., Walters, P., New Quantum Universe, Cambridge University Press, 2003
4. Taylor, E. F, Wheeler, J. A., Space-time Physics-Introduction to Special Relativity, 2nd ed., W.H. Freeman and Company, New York, 1992

5. Taylor, Wheeler, Bertschinger, Exploring Black Holes - Introduction to General relativity, 2nd ed., 2018, https://archive.org/details/exploringblackholes
6. Thorne, K. S., Black Holes and Time Warps, W.W. Norton, New York, 1995
7. Relevant resources from recent journal literature (American Journal of Physics, European Journal of Physics, Scientific American...)

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 5

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 40.0 | 40.0 | 20.0 | 0.0 | 0.0 | 0.0 |

**Provides:** doc. RNDr. Jozef Hanč, PhD.

**Date of last modification:** 27.01.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPE/ PDK/17 | **Course name:** Pedagogical Communication |
|---|---|

**Course type, scope and the method:**
**Course type:** Practice
**Recommended course-load (hours):**
**Per week:** 2 **Per study period:** 28
**Course method:** present

**Number of ECTS credits:** 2

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 217

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 77.42 | 20.28 | 2.3 | 0.0 | 0.0 | 0.0 |

**Provides:** Mgr. Beáta Sakalová, PhD., Mgr. Katarína Petríková, PhD.

**Date of last modification:** 14.09.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPE/ PDD/17 | **Course name:** Pedagogical Diagnostics |
|---|---|

**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:** 2.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 113

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 85.84 | 10.62 | 3.54 | 0.0 | 0.0 | 0.0 |

**Provides:** PaedDr. Michal Novocký, PhD., Mgr. Beáta Sakalová, PhD.

**Date of last modification:** 12.03.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPE/ PD/22 | **Course name:** Pedagogy |
|---|---|

**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:**

**Course level:** II.

**Prerequisities:** KPE/PDU/15

**Conditions for course completion:**
Obtaining the required number of credits in the prescribed composition by the study plan.

**Learning outcomes:**
The student is able to demonstrate the acquired competencies in accordance with the profile of the graduate.

**Brief outline of the course:**
1. Pedagogy, basic pedagogical categories, system of pedagogical scientific disciplines.
2. Education, pages and functions of education, educational process, self-education.
3. Factors of education, educated individual, pedagogue, pedagogical profession, professional competencies.
4. School education, family education.
5. Educational goals, taxonomy, requirements, classification of educational goals.
6. Methods of education.
7. Pedagogical principles.
8. School system of the Slovak Republic.
9. Didactics, basic questions of didactics, current starting points of didactics.
10. Objectives of the teaching process, the teacher's work with the objectives of teaching.
11. Content of education, basic curriculum, extension curriculum, elements and components of curriculum.
12. Assessment in school education, types, functions and criteria of assessment.
13. Pedagogical control, methods and forms of pedagogical control.
14. Teacher's work planning, written preparation of the teacher for teaching.
15. Teaching process, stages of the teaching process and their didactic functions.
16. Organizational forms of teaching, lesson, stages, types of lessons.
17. Teaching methods, classification, functions, selection of teaching methods.
18. Didactic principles of the teaching process.
19. Basic pedagogical documents, textbook, functions and structural components of the textbook.
20. Current concepts of the teaching process.

**Recommended literature:**
Čapek, R.: Moderní didaktika. Praha: Grada, 2016.

Dytrtová, R., Krhutová, M. Učitel. Příprava na profesi. Praha: Grada, 2009.
Kalhous, Z. – Obst, O. 2002. Školní didaktika. Praha: Portál, 2002.
Petlák, E.: Kapitoly zo súčasnej didaktiky. Bratislava: IRIS, 2005.
Prucha, J.: Moderní pedagogika. Praha: Portál, 2012.
Turek, I.: Didaktika. Bratislava: Wolters Kluwer, 2014.
Vališová, A., Kasíková, H.: Pedagogika pro učitele. Praha: Grada, 2010.
Zormanová, L.: Obecná didaktika. Praha: Grada, 2014.

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 25

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 24.0 | 44.0 | 16.0 | 12.0 | 4.0 | 0.0 |

**Provides:**

**Date of last modification:** 12.03.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** KPE/ PPD/22 | **Course name:** Pedagogy and Psychology |
| **Course type, scope and the method:**<br>**Course type:**<br>**Recommended course-load (hours):**<br>**Per week: Per study period:**<br>**Course method:** present | |
| **Number of ECTS credits:** 2 | |
| **Recommended semester/trimester of the course:** | |
| **Course level:** II. | |
| **Prerequisities:** KPE/PDU/15 and KPPaPZ/PPgU/15 | |
| **Conditions for course completion:**<br>Obtaining the required number of credits in the prescribed composition by the study plan. | |
| **Learning outcomes:**<br>The student is able to demonstrate the acquired competencies in accordance with the profile of the graduate. | |
| **Brief outline of the course:**<br>Pedagogy: 1. Pedagogy, basic pedagogical categories, system of pedagogical scientific disciplines. 2. Education, pages and functions of education, educational process, self-education.3. Factors of education, educated individual, pedagogue, pedagogical profession, professional competencies.4. School education, family education. 5. Educational goals, taxonomy, requirements, classification of educational goals.6. Methods of education. 7. Pedagogical principles. 8. School system of the Slovak Republic. 9. Didactics, basic questions of didactics, current starting points of didactics. 10. Objectives of the teaching process, the teacher's work with the objectives of teaching.11. Content of education, basic curriculum, extension curriculum, elements and components of curriculum. 12. Assessment in school education, types, functions and criteria of assessment.13. Pedagogical control, methods and forms of pedagogical control.14. Teacher's work planning, written preparation of the teacher for teaching.15. Teaching process, stages of the teaching process and their didactic functions.16. Organizational forms of teaching, lesson, stages, types of lessons.17. Teaching methods, classification, functions, selection of teaching methods. 18. Didactic principles of the teaching process. 19. Basic pedagogical documents, textbook, functions and structural components of the textbook.20. Current concepts of the teaching process.<br>Psychology: 1.Psychology as a science, goals and subject of psychology in terms of influential psychological directions.2.Pedagogical psychology in teacher training, its subject, function.3.Psychology in school practice: professional forms of control and assistance, psychological examination, counseling process. Crisis intervention. Code of ethics.4.Psychology in school practice: approaches and models of prevention, prevention spectrum, protective and risk factors of risk behavior of schoolchildren in the context of the theory of triadic influence.5.Psychology in school practice: effective strategies for prevention of substance use.6.Psychology of education from from the point of view of psychodynamic approach (Psychoanalysis and Individual Psychology) .7.Psychology of education from the point of | |

view of humanistic psychology.8.Psychology of education from the point of view of cognitive psychology.9.Psychology of learning and types of learning supplemented by examples from school practice. / success in the context of individual theories of cognitive development.11. Nutritional peculiarities, school non-success / intelligence in terms of intelligence.12. Memory and developmental peculiarities, school non-success 13. Attention and developmental peculiarities, school non / success peculiarities of individual types of family, educational styles.15.Social relations at school, me modes of cognition of interaction U and Ž. Psychosocial climate of school class and school, methods of cognition, sociometry.16.Social influence: presence of others, interpersonal influences and meaningful understanding of social influence in teacher's work.17.Teacher as a professional, his professional ability, teaching style, attitudes towards students, expectations towards students, coping with stress, burnout syndrome.18.Students: gifted and talented, school failure, non-thriving pupils and failing pupils, pupils' self-efficacy.19. Types of research plans and their creation (setting goals, hypotheses, variables, selection of research sample) in the context of pedagogical-psychological research.20. Selected methods of pedagogical-psychological research - questionnaire, interview, observation and possibilities of their use in school practice.

**Recommended literature:**

Pedagogika:
Čapek, R.: Moderní didaktika. Praha: Grada, 2016.
Dytrtová, R., Krhutová, M. Učitel. Příprava na profesi. Praha: Grada, 2009.
Kalhous, Z. – Obst, O. 2002. Školní didaktika. Praha: Portál, 2002.
Petlák, E.: Kapitoly zo súčasnej didaktiky. Bratislava: IRIS, 2005.
Prucha, J.: Moderní pedagogika. Praha: Portál, 2012.
Turek, I.: Didaktika. Bratislava: Wolters Kluwer, 2014.
Vališová, A., Kasíková, H.: Pedagogika pro učitele. Praha: Grada, 2010.
Zormanová, L.: Obecná didaktika. Praha: Grada, 2014.
Psychológia:
Mareš, J.: Pedagogická psychologie. Praha : Grada 2013.
Mareš, J., & ČÁP, J.: Psychologie pro učitele. Praha: Portál, 2001.
Džuka, J.: Základy pedagogickej psychológie. Prešov: UK 2003.
Orosová, O. a kol: Psychológia a pedagogická psychológia 1. Košice: UPJŠ, 2005.
Orosová, O. a kol.: Základy prevencie užívania drog a problematického používania internetu v školskej praxi. Košice: UPJŠ 2012.
Bačíková, M., Janovská, A. (2019) . Základy metodológie pedagogicko-psychologického výskumu. Sprievodca pre študentov učiteľstva. 2. rozšírené vydanie. Šafárik press, Košice.
Gavora, P. a kol. (2010). Elektronická učebnica pedagogického výskumu. Bratislava: Univerzita Komenského, 2010. dostupné online na www. e-metodologia. fedu. uniba. sk.
Vágnerová, M.: Základy psychológie. Praha : Karolinum 2005.
Vágnerová, M.: Vývojová psychológie. Praha : Karolinum 2005.
Vágnerová, M.: Škoní podadenská psychologie pro pedagogy. Praha : Karolinum 2005. Výrost, J., Slaměník, I.: Sociální psychologie. Praha : Grada 2008.
Výrost, J., Salměník, I.: Aplikovaná sociální psychológie I. Praha: Portál 1998.
Strana: 2
Fontana, D. : Psychologie ve školní praxi. Praha: Portál 1997.
Zelina, M.: Stratégie a metódy rozvoja osobnosti. Bratislava, Iris: 1996.
Křivohlavý, J.: Pozitívni psychologie. Praha: Portál 2004.
Křivohlavý, J.: Psychologie zdraví. Praha: Portál 2003.

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 157

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 31.85 | 33.76 | 24.2 | 8.92 | 0.64 | 0.64 |

**Provides:**

**Date of last modification:** 12.03.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

**COURSE INFORMATION LETTER**

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ FYU/22 | **Course name:** Physical Problems |
|---|---|

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

**Number of ECTS credits:** 3

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
On- line set of problems for self solving is avialable for students. One task is define for each seminar for testing of student preparation. Production and presentation of three own problems is necessary.
problem solving 40 p
obtained problem 10 p
own problems 10 p
oral examination 40 p
Final:
A 100-90 B 89-80 C 79-70 D 69-60 E 59-50 F 49-0

**Learning outcomes:**
Students will be ready for using of problem solving strategies at lower and upper secondary school levels. Clasical problems are studied in more details from different pont of view (students knowledge anmd skills, technologies, motivation, computer modelling and measuremets).

**Brief outline of the course:**
Methods of problem solving are presented and trained. The sets of typical problems are analysed. Uding of modelling and real experiments is discussed.

**Recommended literature:**
1.Baláž, P. : Zbierka úloh z fyziky, SPN Bratislava, 1971
2.Bartuška,K: Postup při řešení fyzikálních úloh, Sbírka řešených úloh z fyziky pro střední školy I, Praha, Prometheus, 1997, s. 5-10.
3.Halpern, A.: 3000 solved problems in Physics, McGraw-Hill, Inc., USA, 1988
4.Janovič,J., Koubek,V. Pecen,I.: Vybrané kapitoly z didaktiky fyziky. Bratislava, UK, 1999,
5.Jurčová, M., Dohňanská, J., Pišút, J., Velmovská, K.: Didaktika fyziky – rozvíjanie tvorivosti žiakov a študentov. Bratislava, UK, 2001,
6.Kružík, M.: Sbírka úloh z fyziky pro žáky strědních škol, SPN, Praha, 1984
7.Lindner, H.: Riešené úlohy z fyziky, Alfa, Bratislava, 1973
8.Linhart, J. (1976): In: Volf, I.: Metodika řešení úloh ve výuce fyziky na základní škole. Hradec Králové, MAFY, 1998,
9.Pietrasiński, Z. (1964): In: Volf, I.: Metodika řešení úloh ve výuce fyziky na základní škole. Hradec Králové, MAFY, 1998,

10.Scholtz, E., Kireš, M.: Fyzika – kinematika pre gymnázia s osemročným štúdiom. Bratislava, SPN, 2001,
11.Šedivý,P., Volf, I.: Dopravní kinematika a grafy. Hradec Králové, MAFY, 1998.
12.Volf,I. (1975): In: Bednařík, M., Lepil, O.: Netradiční typy fyzikálních úloh. Praha, PROMETHEUS,1995,
13.Volf,I.: Jak řešit úlohy fyzikální olympiády, XXIII. Ročník soutěze fyzikální olympiády ve školním roce 1981/82, Praha, SPN, 1981,
14.Volf,I.: Metodika řešení úloh ve výuce fyziky na základní škole. Hradec Králové, MAFY, 1998.
15.Halpern, A.: 3000 solved problems in Physics, McGraw-Hill, Inc., USA, 1988

**Course language:**
Slovak, English

**Notes:**

**Course assessment**
Total number of assessed students: 13

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

**Provides:** doc. RNDr. Marián Kireš, PhD.

**Date of last modification:** 15.02.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ MSSU/22 | **Course name:** Physics and Didactics of Physics |
|---|---|

**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:**

**Course level:** II.

**Prerequisities:** ÚFV/DF1/22 and ÚFV/FKS/22 and ÚFV/DF2/22 and ÚFV/ASFU/22

**Conditions for course completion:**
The graduate has knowledge of physics in wider context. He is able to implement and apply knowledge of physics into education. He is able to apply knowledge of theory of education to selected physical content.

**Learning outcomes:**
Competencies in accordance with the graduate profile.

**Brief outline of the course:**
The graduate has knowledge of physics in wider context. He is able to implement and apply knowledge of physics content into education. He is able to apply knowledge of theory of education to selected physical content.
Physics:
Selected problems of Solid state physics, Subnuclear physics and Astrophysics.
Didactics of physics:
State educational curriculum ISCED 2,3-Physics. Development of scientific literacy. Physical experiment. Active learning, inquiry-based education in physics. Formative and summative assessment. Talented students and informal education. Analysis of lower and upper secondary teaching units.

**Recommended literature:**

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 11

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 45.45 | 27.27 | 9.09 | 9.09 | 9.09 | 0.0 |

**Provides:**

**Date of last modification:** 15.02.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## 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:** 1., 3.

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

**Prerequisities:**

**Conditions for course completion:**
1. Lectures are optional, but highly recommended due to the presentation of otherwise difficult-to-access information and its synthesis.
2. In addition to the exam, the student must complete a mandatory 5-hour field trip focusing on the aspects that determine the spread of plants on Earth, solve practical tasks from the topic of the subject and prepare a semester presentation on the given topic, the presentation is defended at a scientific mini-conference.

**Learning outcomes:**
After completing the subject, the student is oriented in various aspects of phytogeographic issues and can apply the acquired knowledge both in basic research within chorology, historical and regional phytogeography, as well as in the evaluation of world biomes. The practical application of the subject is within the study of geographically and climatically conditioned changes in vegetation, in the assessment of the reduction of biodiversity and the extinction of the natural plant communities of the Earth, and the acquired knowledge can be used in work in environmental protection.

**Brief outline of the course:**
1. History of the subject. Plants and environment. Dynamics of the earth's surface.
2. Abiotic and biotic factors of the plant environment.
3. Chorology, range, areal disjunctions, relics, endemism, vicarism.
4. Elements of flora - older and newer approaches.
5. Main features of florogenesis. Paleozoic, Mesozoic, Cenozoic.
6. Main features of florogenesis. Cenozoic - Pleistocene, Holocene.
7. Basics of GIS (geographic information systems) and their use in botanical research.
8. Postglacial development of vegetation in Slovakia.
9. Current changes in terrestrial vegetation and their study, plant invasions.
10. Geography of vegetation: from tropical rainforests to tundra I.
11. Geography of vegetation: from tropical rainforests to tundra II.
12. Geographical origin of cultivated plants.
Seminars and exercises consist of a 5-hour excursion focusing on the connections and conditionality of plant distribution and indoor exercises focusing on an overview of phytogeographical literature, atlases of plant distribution and their importance, types of mapping, types of areas, practical

assessment of floristic elements and types of disjunctions , work with maps of specific taxa throughout Europe. Further: regional phytogeography of the Earth, historical overview of opinions on the phytogeographical (floristic) division of Slovakia. Plant phylogeography. Student presentations of final semester theses (phytogeographical mini-conference).

**Recommended literature:**

Hendrych R.: Fytogeografie. - SPN, Praha 1984.
Prach K., Štech M., Říha P.: Ekologie a rozšíření biomů na Zemi. - Scientia, Praha 2009.
Krippel E.: Postglaciálny vývoj vegetácie Slovenska. – Veda, vyd. SAV, Bratislava, 1986.
Dahl, E.: The Phytogeography of Northern Europe, - Cambridge University Press, 2007.
Brown J. H., Lomolino M. V.: Biogeography. - Sinauer Associates, Sunderland, 1998.
Myers A. A., Giller P. S.: Analytical Biogeography. - Chapman & Hall, 1990.
Various literature devoted to the geography of vegetation (mainly nature and travel), articles in National Geographic, Živa, Vesmír and other magazines.

**Course language:**

**Notes:**

**Course assessment**

Total number of assessed students: 404

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 38.61 | 22.03 | 21.53 | 8.66 | 8.42 | 0.74 |

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

**Date of last modification:** 24.07.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPPaPZ/PASZ/17 | **Course name:** Problem and Aggressive Behaviour of Pupils. Etiology, Prevention and Intervention. |
|---|---|

**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:** 2.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**
General principles of mental development as a basis for recognizing mental disorders in children and adolescents. Etiology of mental disorders and developmental disorders in children and adolescents. Definition of aggressive behavior. Concepts of aggression vs. aggressiveness. Theoretical approaches to aggression. Causes and factors of aggressive behavior. Violence at school and in the family. Bullying. Psychology of problem students. Problems resulting from disturbed behavior. Problems arising from group relationships. Adolescent lifestyle issues. Problems resulting from impaired emotional experience. Solving problematic and aggressive behavior in the school environment. School classroom management, group preventive and intervention work with the classroom. Crisis intervention. Work with parents of problem students. Principles of interviewing a parent. Cooperation with other experts. Prevention of aggressive and problematic behavior at school. Classroom and school climate, school prevention programs.
Viac o tomto zdrojovom texteNa získanie ďalších informácií o preklade sa vyžaduje zdrojový text
Odoslať spätnú väzbu
Bočné panely

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 125

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 80.0 | 14.4 | 5.6 | 0.0 | 0.0 | 0.0 |

**Provides:** PhDr. Anna Janovská, PhD.

**Date of last modification:** 30.01.2025

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** KPPaPZ/KPE/EPU/15 | **Course name:** Professional Ethics for Teachers and School Counsellors |

**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:** 2., 4.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
1. Active participation in seminars (max. 1 absence) - 30p, 2. Preparation for the seminar - 40p, 3. Preparation (description and analysis) of the moral dilemma - 30p. By summing the points obtained during the semester, the student obtains the final evaluation according to the scale: A 87 - 100, B 77 - 86, C 69 - 76, D 61 - 68, E 56 - 60, FX 55 and less. Detailed information in the electronic board of the course in AIS2. The teaching of the subject will be realized by a combined method.

**Learning outcomes:**
Knowledge: Students will acquire basic knowledge of the principles of teacher ethics and the ethics of school counselors, understanding the theoretical foundations of moral issues and ethical codes related to these professions.
Skills: They will learn to analyze and solve moral problems in pedagogical practice, discuss ethical issues, and critically evaluate situations with a moral context.
Competencies: They will be able to apply ethical principles in practice, resolve moral dilemmas, and promote a value-oriented school culture.

**Brief outline of the course:**
Moral emotions (theories of emotion, the center of emotions in the brain, types of emotions and their manifestations)
Development of moral reasoning, cognitive approaches to moral reasoning and their comparison (Piaget, Kohlberg, Gilligan, Eisenberg, Selman, Lind),
Moral behavior (from the point of view of learning theories) and moral (vs. social and emotional) intelligence in the work of a teacher
Possibilities of examining moral behavior and judgment (socio-psychological research of conformity, obedience, aggression and psychodiagnostic approaches to the determination of moral judgment)
Morality and professional ethics in general (ethical principles in helping professions) and codes of ethics
Professional ethics of the teacher and educational counselor (terminology, concepts, main principles of teacher ethics) and teacher ethics codes
Moral dilemmas and ways of solving them, MD of teaching practice

Possibilities of influencing and stimulating moral judgment, use of moral dilemma in education
Cheating and other unethical manifestations in the school environment, ethics and etiquette of final exams

**Recommended literature:**

Ráczová, B., & Babinčák, P. (2009). Základy psychológie morálky. Košice: Equilibria. ISBN 978-80-7097-786-6.
Gluchmanová, M. (2007). K niektorým terminologickým otázkam učiteľskej etiky. Pedagogická orientace, 17(2), 11–25. ISSN 1211-4669.
Malankievičová, S. (2008). Profesijná etika. Prešov: FF PU.
Miezgová, J., & Vargová, D. (2007). Etika. Bratislava: SPN Mladé letá.
Remišová, A. (2008). Dejiny etického myslenia v Európe a USA. Bratislava: Kalligram.
Zelina, M. (2010). Teória výchovy alebo hľadanie dobra. Bratislava: SPN.
Gluchmanová, M. (2009). Uplatnenie princípov a hodnôt etiky sociálnych dôsledkov v učiteľskej etike. Prešov: FF PU. ISBN 978-80-555-0042-3.
Campbell, E. (2003). The ethical teacher. Berkshire, England: Open University Press. ISBN 0-335-21219-0.
Miller, C. B. (2021). Moral psychology (Elements in Ethics). Cambridge University Press.
Tiberius, V. (2023). Moral psychology: A contemporary introduction (2nd ed.). Routledge.

**Course language:**
slovak

**Notes:**

**Course assessment**
Total number of assessed students: 567

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 97.35 | 2.29 | 0.35 | 0.0 | 0.0 | 0.0 |

**Provides:** doc. Mgr. Gabriel Baník, PhD.

**Date of last modification:** 04.02.2025

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

**COURSE INFORMATION LETTER**

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** KPPaPZ/PPgU/15 | **Course name:** Psychology and Educational Psychology |

**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:** 1.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Assessment: A maximum of 40 points can be earned during the semester (through two assignments and a written verification). Exam entry criteria: Active participation in exercises and a minimum of 30 points earned during the semester. Continuous assessment (40%) and written examination (60%). For more information and updates, refer to the electronic board of the course AIS2. Final evaluation: A 87 – 100 B 77 – 86 C 69 – 76 D 61 – 68 E 56 – 60 FX 55 and less Combined method. The information will be yearly specified on the electronic noticeboard of the course in AIS2, aleternatively in LMS UPJŠ or MS Teams environment.

**Learning outcomes:**
Students will be able to show understanding of the human behaviour in educational situations.
Students will be able to describe, explain and justify possible teachers‘ decisions by using psychological concepts, principles and theories.
Students will be able to apply the psychological findings in the field of education.
Students will be able to explain how adolescents learn and retain new information, to explain their behaviour in response to educational environment.
Students will be able to explain the desired data-based modification of adolescents‘ behaviour to bring an all-round development of his personality and school performance, to explain the desired data-based modification of the behaviour of adolescents with educational problems, with disadvantages.

**Brief outline of the course:**
Introduction: The content of the course is based on current knowledge of psychological disciplines, especially pedagogical and school psychology.
Teaching is realized by a combination of lectures with engaging narrative interpretation and seminars using interactive, experiential methods, discussion and open communication with mutual respect, support of independence, activity and motivation of students.
Syllabus: Goals and Subject of Psychology and Educational Psychology, the field and its transformations (Educational psychology and its changes over time, its mission, and possible personality transformations). School psychology, school psychologist. Professional forms of support in school practice. Psychological assessment. Counseling process. Crisis intervention. Effective strategies and programs for the prevention of risky behavior among schoolchildren.

Risk/protective factors of risky behavior. Implementation of psychological concepts of personality into school practice. Psychological and educational-psychological characteristics of learning (psychology of learning, types of learning, learning styles). Developmental characteristics and school (un)success (Cognitive, social, emotional, and personality development in childhood and adolescence, Psychological characteristics of adolescence and adulthood. Intelligence, memory, attention, and developmental characteristics of schoolchildren, and school (un)success). Social psychology of the school (teacher-student relationships, methods of understanding teacher-student interaction, the psychosocial climate of the school) and family (factors of family functionality, functional/problematic/dysfunctional/non-functional family, parenting styles). Main actors: Teacher (the teacher as a professional, their professional competence, teaching style, attitudes toward students, expectations of students, coping with stress, burnout syndrome), students (gifted and talented, school failure, successful/unsuccessful students, and failing students, student self-efficacy), school class (as a small social group, internal and external differentiation, bullying, and prevention), psychosocial climate of the school class.

**Recommended literature:**

Compulsory:
Lectures (Literary sources in published lectures)
Mareš, J.: Pedagogická psychologie. Praha : Grada 2013.
Recommended:
Mareš, J., & ČÁP, J.: Psychologie pro učitele. Praha: Portál, 2001.
Džuka, J.: Základy pedagogickej psychológie. Prešov: UK 2003.
Orosová, O. a kol: Psychológia a pedagogická psychológia 1. Košice: UPJŠ, 2005.
Orosová, O. a kol.: Základy prevencie užívania drog a problematického používania internetu v školskej praxi. Košice: UPJŠ 2012.
Vágnerová, M.: Základy psychológie. Praha : Karolinum 2005.
Vágnerová, M.: Vývojová psychológie. Praha : Karolinum 2005.
Vágnerová, M.: Škoní podadenská psychologie pro pedagogy. Praha : Karolinum 2005. Výrost, J., Slaměník, I.: Sociální psychologie. Praha : Grada 2008.
Výrost, J., Salměník, I.: Aplikovaná sociální psychológie I. Praha: Portál 1998.
Fontana, D. : Psychologie ve školní praxi. Praha: Portál 1997.
Zelina, M.: Stratégie a metódy rozvoja osobnosti. Bratislava, Iris: 1996.
Křivohlavý, J.: Pozitívni psychologie. Praha: Portál 2004.
Křivohlavý, J.: Psychologie zdraví. Praha: Portál 2003.
ELECTRONIC INFORMATION RESOURCES (UL UPJŠ)

**Course language:**

slovak

**Notes:**

**Course assessment**

Total number of assessed students: 1820

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 10.88 | 20.27 | 24.12 | 22.25 | 20.16 | 2.31 |

**Provides:** prof. PhDr. Oľga Orosová, CSc., PhDr. Anna Janovská, PhD.

**Date of last modification:** 09.09.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

**COURSE INFORMATION LETTER**

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** KPPaPZ/PTPN/17 | **Course name:** Psychology of Creativity and Working with Gifted Students in Teacher Practice |

**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:** 2.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
1. active participation in lessons (max. 2 absences) - 30p, 2. own output at the seminar - 40p, 3. seminar work - 30p. By summing the points obtained during the semester, the student obtains the final evaluation according to the given scale: A 87 - 100, B 77 - 86, C 69 - 76, D 61 - 68, E 56 - 60, FX 55 and less. Detailed information in the electronic board of the course in AIS2. The teaching of the subject will be realized by a combined method.

**Learning outcomes:**
The student understands the basic factors and process of creativity. The student is able to explain the specifics of working with the gifted. He knows the methods of identifying talent and also can apply methods to support creativity and the development of talent in the implementation of creative creativity in education.

**Brief outline of the course:**
The concept of creativity.
A brief history of the theory of creativity.
Social, psychological and biological factors of creativity.
Cognitive processes in creativity.
Creativity and cognitive style.
Development of creativity.
Talent and giftedness.
Methods of determining creativity and talent.
Methods of developing creativity and talent.
Creativity and talent development programs. Specifics of working with the gifted children.

**Recommended literature:**
DOČKAL, V. (2006): Inteligencia a tvorivosť, tvorivé nadanie od intelektovej schopnosti po štruktúru osobnosti. In: KUSÁ, D. a kol. EDS. (2006): Zjavná a skrytá tvorivosť. Bratislava: Slovak Academic Press
HŘÍBKOVÁ, L. (2009): Nadání a nadaní. Pedagogicko- psychologické přístupy, modely, výzkumy a jejich vztah ke školské praxi. Praha: Grada Publishing
DACEY, J.S.- LENNON, K.H. (2000): Kreativita. Praha: Grada

GROSS, M.U.M. (2009): Highly Gifted Young People: Development from Childhood to Adulthood. In: SHAVININA, L. (2009): International Handbook on Giftedness. Part one. Springer
KUSÁ, D. a kol. EDS. (2006): Zjavná a skrytá tvorivosť. Bratislava: Slovak Academic Press
KOLKOVÁ, S. (2000): Tvorivosť a jej rozvoj vo voľnočasových aktivitách detí (v školskom klube). Bratislava: Metodické centrum v Bratislave
LOKŠOVÁ, I., - LOKŠA, J.: (2003): Tvořivé vyučování. Praha: Grada
LAZNIBATOVÁ, J. (2004): Špecifiká vývinu a vzdelávania nadaných detí. In: Psychológia a patopsychológia dieťaťa, roč.39, č. 2-3
LAZNIBATOVÁ, J. (2001): Nadané dieťa, jeho vývin, vzdelávanie a podporovanie. Bratislava: Iris
MESÁROŠOVÁ, M. (1998): Nadané deti. Poznávanie a rozvíjanie ich osobnosti. Prešov: Manacon
SZOBIOVÁ, E. (2004): Tvorivosť – Od záhady k poznaniu. Bratislava: Stimul - Centrum informatiky a vzdelávania FIF UK
National and international scientific journlas

**Course language:**
slovak

**Notes:**

**Course assessment**
Total number of assessed students: 81

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

**Provides:** Mgr. Lucia Barbierik, PhD.

**Date of last modification:** 24.06.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** KSSFaK/ ČGUAP/15 | **Course name:** Reading Literacy in Educational Process |
| **Course type, scope and the method:**<br>**Course type:** Lecture<br>**Recommended course-load (hours):**<br>**Per week:** 2 **Per study period:** 28<br>**Course method:** present | |
| **Number of ECTS credits:** 2 | |
| **Recommended semester/trimester of the course:** 2. | |
| **Course level:** II. | |
| **Prerequisities:** | |
| **Conditions for course completion:** | |
| **Learning outcomes:** | |
| **Brief outline of the course:** | |
| **Recommended literature:** | |
| **Course language:** | |
| **Notes:** | |
| **Course assessment**<br>Total number of assessed students: 48 | |

| abs | n |
|---|---|
| 100.0 | 0.0 |

| |
|---|
| **Provides:** doc. PaedDr. Ivica Hajdučeková, PhD. |
| **Date of last modification:** 07.03.2025 |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. |

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/MPPb/15 | **Course name:** Scheduled practice teaching |
|---|---|

**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:** 1

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

**Course level:** II.

**Prerequisities:** KPE/MPPa/15 and KPE/PDU/15 and (KPPaPZ/PaSPP/09 or KPPaPZ/PPgU/15)

**Conditions for course completion:**
During the practice student observe 11 biology lessons and leads one own biology hour under the guidance of a teacher trainer.
Confirmation of classroom visits.
Written assessment from the teacher trainer.

**Learning outcomes:**
Students acquire knowledge by observing the practical application of teaching skills for teaching the subject of biology and getting to know the organization of school work. Introduction into practical implementation of biology lesson.

**Brief outline of the course:**
Students observe the process of teaching biology at primary and secondary school and analyzed it with teacher trainer. Practice takes place continuously during the course of the semester. Practice is scheduled once a week at the time of first to third lesson in schools.
The first two hours observation/teaching, the third hour analysing process under the guidance of a teacher trainer.

**Recommended literature:**
Current biology textbooks for primary and secondary schools in Slovakia.

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 568

| abs | n |
|---|---|
| 99.65 | 0.35 |

**Provides:**

**Date of last modification:** 16.12.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ MPPb/15 | **Course name:** Scheduled practice teaching |
|---|---|

**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:** 1

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

**Course level:** II.

**Prerequisities:** KPE/MPPa/15 and KPE/PDU/15 and (KPPaPZ/PaSPP/09 or KPPaPZ/PPgU/15)

**Conditions for course completion:**
Student observes 11 physics lessons and leads one own physics lesson under the guidance of a teacher trainer. Confirmation of classroom visits. Written assessment made by teacher trainer.

**Learning outcomes:**
Students acquire knowledge by observing the practical applications of teaching skills for teaching the subject of physics and getting known about the organization of school work. Studneets gain first experience with teaching the subject of physics.

**Brief outline of the course:**
Students observe the process of teaching physics at lower and upper secondary schools and analyze it with teacher trainer. Practice takes place continuously durin the course of the semester. Practice is scheduled once a week at the time of the first to third lesson at schools. The first two lessons are obeservation/teaching, the third lesson - analysing the teaching process under the guidance of the teacher trainer.

**Recommended literature:**

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 86

| abs | n |
|---|---|
| 100.0 | 0.0 |

**Provides:** doc. RNDr. Jozef Hanč, PhD.

**Date of last modification:** 03.05.2015

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ FEP1/15 | **Course name:** School Computer-Based Physical Laboratory |
|---|---|

**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:** 3

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Terms and conditions of assessment during the semester
-participation in classes in accordance with study regulations and teacher´s instructions
-active participation at seminars and exercises
-submitting all the assignments in accordance with teacher´s instruction
-realization, presentation and defence of the final assignment
Final assessment:
-based on assessment during the semester
Conditions for successful completion of the course:
-participation in lessons in accordance with the study regulations and teacher's instructions
-achieving the level higher than 50 % in assessment during the semester and in final assessment

**Learning outcomes:**
By the end of the course student gains an overview about the possible use of digital technologies to support active learning in physics implementing methods of inquiry-based science education. He gains skills to use and develop activities on measuring data with the help of datalogging, measuring on videorecordings and picture and modeling physical processes. Student is able to implement such activities in physics teaching to support active learning, conceptual understanding and inquiry skills ´ development.

**Brief outline of the course:**
1. Inquiry-based science education (IBSE). Inquiry skills. Digital technologies to enhance IBSE.
2. Inquiry teaching and learning in computer-based laboratory. Digital tools for data collection, videomeasruement, modeling and data processing and analysis.
3. Data collection in real experiment with the help of sensors.
4. Processing and analysis of data gained with the help of sensors.
5.Activities on real-time measurements and processing and data analysis implementing IBSE methods.
6. Videomeasurement. How to measure on videorecording and picture.
7. Processing and analysis of data gained from videomeaurement.
8. Activities on videomeasurement and processing and data analysis implementing IBSE methods

9.Mathematical modeling with the help of computer. Role of computer modeling in science education.
10. Activities on computer modeling implementing IBSE methods.
11.Inquiry-based science education and methods of assessment.
12.Lesson design implementing digital technologies and IBSE methods.

**Recommended literature:**

Learning by doing the CMA way, available on https://cma-science.nl/
SOKOLOFF, David, THORNTON, Ronald, K.: Interactive Lecture Demonstrations, Wiley , 2006

**Course language:**

English

**Notes:**

**Course assessment**

Total number of assessed students: 17

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 76.47 | 23.53 | 0.0 | 0.0 | 0.0 | 0.0 |

**Provides:** doc. RNDr. Zuzana Ješková, PhD.

**Date of last modification:** 15.09.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/PSP1/22 | **Course name:** School Physical Experiments I |
|---|---|

**Course type, scope and the method:**
**Course type:** Practice
**Recommended course-load (hours):**
**Per week:** 2 **Per study period:** 28
**Course method:** present

**Number of ECTS credits:** 2

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
continuous written tests
being active in practises
final oral examination

**Learning outcomes:**
To gain basic skills with demonstration and physics interpretation of school physics experiments belonging to the subject matter in Physics classes at basic schools and high schools. To become familiar with didactic procedures related to using school experiments in different phases of the educational process.

**Brief outline of the course:**
The practices are aimed at practical realization and physics interpretation of school demonstration experiments from selected topics of the physics subject matter for basic-school and high-school pupils. The emphasis is on familiarizing with teaching aids and didactic devices used in performing school physics experiments and on getting basic skills with their utilization in physics teaching.

**Recommended literature:**
1.Kašpar,E.,Vachek,J.: Pokusy z fyziky na středních školách, I.díl, SPN Praha,1967
2.Koubek, V. a kol.: Školské pokusy z fyziky, SPN Bratislava, 1992
3.http://physedu.science.upjs.sk/sis/fyzika/experimenty/index.htm

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 19

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 73.68 | 26.32 | 0.0 | 0.0 | 0.0 | 0.0 |

**Provides:** doc. RNDr. Marián Kireš, PhD.

**Date of last modification:** 15.02.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

**COURSE INFORMATION LETTER**

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚFV/ PSP2/22 | **Course name:** School Physical Experiments II |

**Course type, scope and the method:**
**Course type:** Practice
**Recommended course-load (hours):**
**Per week:** 2 **Per study period:** 28
**Course method:** present

**Number of ECTS credits:** 2

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Terms and conditions of assessment during the semester
-participation in classes in accordance with study regulations and teacher´s instructions
-tests during the semester 50 points
-active participation 20 points
-first assessment 15points
-second assessment 15points
Final assessment:
-based on assessment during the semester
Conditions for successful completion of the course:
-participation in lessons in accordance with the study regulations and teacher's instructions
-achieving the level higher than 50 % in assessment during the semester and in final assessment

**Learning outcomes:**
By the end of the course sudents gain knowledge and broaden skills necessary for understanding methods, techniques and physical interpretations of all types of school physical experiments that are parts of the subject matter in physics classes at lowe and upper secondary schools in accordance with the course curricular content

**Brief outline of the course:**
The practises are aimed at practical realization and physics interpretation of school demonstration experiments from selected topics of the physics subject matter for basic- and high-school pupils and their convenient incorporation into educational process. The emphasis is on familiarizing with teaching aids and didactic devices used in performing school physics experiments and on extending skills with their utilization in physics teaching. The course content involves:
1. Oscillations
2. Waves and acoustics
3. Electrostatics
4. Electric current
5. Stationar magnetic field
6. Non-stationar magnetic field
7. Alternating current

8.Optics

**Recommended literature:**

ONDEROVÁ, Ľudmila, KIREŠ, Marián, JEŠKOVÁ, Zuzana, DEGRO, Ján: Praktikum školských pokusov z fyziky II. , PF UPJŠ, Košice, 2004
LEPIL, Oldřich, HOUDEK, Václav, PECHO, Alojz: Fyzika pre 3.ročník gymnázií, SPN, Bratislava, 1998
PIŠÚT, Ján a kol, Fyzika pre 4.ročník gymnázia , SPN, Bratislava, 1987
DEMKANIN, Peter, HORVÁTH, Peter, CHALUPKOVÁ, Soňa, ŠUHAJOVÁ, Zuzana: Fyzika pre 2.ročník gymnázia a 6.ročník gymnázia s osemročným štúdiom, Združenie EDUCO, 2010
DEMKANIN, Peter, HORVÁTHOVÁ, Martina: Fyzika pre 3.ročník gymnázia a 7.ročník gymnázia s osemročným štúdiom, Združenie EDUCO, 2012

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 14

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

**Provides:** doc. RNDr. Zuzana Ješková, PhD.

**Date of last modification:** 15.02.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ SPP/08 | **Course name:** School experiments and observations |
|---|---|

**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:** II.

**Prerequisities:**

**Conditions for course completion:**
Didactic analysis after conducted experiments and observations. Semester Project Methodology of practical exercize on the chosen topic biology curriculum, presentation and demonstration of integrated experiment at the end of the semester.

**Learning outcomes:**
Teacher preparation, how to carry out biological school experiments and classroom observations.

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

**Recommended literature:**
HUDÁKOVÁ, A., KIMÁKOVÁ, K. 2005. Demonštračné pokusy a pozorovania z biológie rastlín. Košice: UPJŠ; Prírodovedecká fakulta, 84 s. ISBN 80-7097-610-1.
UŠÁKOVÁ, K. ČIPKOVÁ, E., NAGYOVÁ, S. GÁLOVÁ, T. 2012, Biológia pre gymnáziá 7: Praktické cvičenia a seminár I, Slovenské pedagogické nakladateľstvo - Mladé letá (Bratislava) 2. vyd. ISBN: 9788010023905
UŠÁKOVÁ, K. ČIPKOVÁ, E., NAGYOVÁ, S. GÁLOVÁ, T. 2012, Biológia pre gymnáziá 8: Praktické cvičenia a seminár II, Slovenské pedagogické nakladateľstvo - Mladé letá (Bratislava) ISBN9788010023912
Internal study materials in Moodle https://lms.upjs.sk/login/index.php

**Course language:**
Slovak

**Notes:**
x

**Course assessment**
Total number of assessed students: 115

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 66.96 | 19.13 | 11.3 | 1.74 | 0.0 | 0.87 |

**Provides:** PaedDr. Andrea Lešková, PhD.

**Date of last modification:** 31.05.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ DEX/22 | **Course name:** Selected Demonstration Experiments |
|---|---|

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

**Number of ECTS credits:** 3

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Seminar work – a project dealing with hands-on experiments and their role in Physics teachig.
Oral examination

**Learning outcomes:**
The goal of the course is to develop pedagogic skills and creativity of further Physics teachers through non-traditional physical experiments.

**Brief outline of the course:**
The aim of the lecture is to show a lot of non-traditional physical experiments which can help students understand physical phenomena and find their connection with everyday life. The experiments are mainly hands-on ones which can be performed with simple tools and don't require any special equipment. The experiments are carried out by students themselves. Through these experiments students are able to gain practical skills, develop experimental habits and verify their theoretical knowledge.

**Recommended literature:**
1. Onderová Ľ.:Netradičné experimenty vo vyučovaní fyziky, MC Prešov,2002
2. Lorbeer,G.L.,Nelsonová, L.W.: Fyzikální pokusy pro děti, Portál, Praha, 1998
3. Kostič, Ž.: Medzi hrou a fyzikou, Alfa, Bratislava, 1971
4. Kireš, M., Onderová, Ľ.: Fyzika každodenného života v experimentoch a úlohách, JSMF Bratislava 2001, ISBN 80-7097-446-X
5. http://physedu.science.upjs.sk/sis/fyzika/experimenty/index.htm

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 13

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 76.92 | 7.69 | 0.0 | 0.0 | 0.0 | 15.38 |

| |
|---|
| **Provides:** doc. RNDr. Marián Kireš, PhD. |
| **Date of last modification:** 15.02.2022 |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. |

**COURSE INFORMATION LETTER**

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ VPF1/15 | **Course name:** Selected General Physics Problems I |
|---|---|

**Course type, scope and the method:**
**Course type:** Lecture
**Recommended course-load (hours):**
**Per week:** 3 **Per study period:** 42
**Course method:** present

**Number of ECTS credits:** 3

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

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
1. writing exam 20 points
2. writing exam 20 points
self examples 60 bodov
A 100-90 B 89-80 C 79-70 D 69-60 E 59-50 F 49-0

**Learning outcomes:**
Physics interpretationf of everyday phenomena can help with deeper understanding of physics problems.

**Brief outline of the course:**
1. Kinematics and dynamics
2. Hydrostatics and hydrodynamics
3. Surface properties of liquids
4. Thermics and Thermodynamics
5. Thermics and Thermodynamics II
6. Electrostatics
7. Electric field
8. Magnetic field
9. Mechanical oscillations, resonance, waves
10. Acoustics
11. Ray Optics
12. Wave Optics
13. Student assignments presentation

**Recommended literature:**
1.Nahodil, J.: Fyzika v bežnom živote, Prometheus, Praha, 1996
2.Tulčinskyj, : Zbierka kvalitatívnych úloh z fyziky, SPN, Bratislava, 1990
3.Kašpar, E. : Problémové vyučovanie a problémové úlohy, SPN, Praha1982
4.Feynman, R.P. : Feynmanove prednášky z fyziky 1-5, Alfa, 1985
5.Landau, Kitajgorodskij : Fyzika pre každého, Alfa 1972
6.Lange, V.: To chce vtip!, Alfa, Bratislava, 1988
7.http://kekule.science.upjs.sk/fyzika

8.http://physedu.science.upjs.sk

**Course language:**
Slovak, English

**Notes:**

**Course assessment**
Total number of assessed students: 33

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 81.82 | 15.15 | 0.0 | 0.0 | 0.0 | 3.03 |

**Provides:** doc. RNDr. Marián Kireš, PhD.

**Date of last modification:** 28.03.2020

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

**COURSE INFORMATION LETTER**

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚFV/ VPF2/22 | **Course name:** Selected General Physics Problems II |
| **Course type, scope and the method:**<br>**Course type:** Lecture<br>**Recommended course-load (hours):**<br>**Per week:** 2 **Per study period:** 28<br>**Course method:** present | |
| **Number of ECTS credits:** 2 | |
| **Recommended semester/trimester of the course:** 3. | |
| **Course level:** II. | |
| **Prerequisities:** | |
| **Conditions for course completion:**<br>presentation of selected problem 30 p<br>writing exam 70 p<br>A 100-90 B 89-80 C 79-70 D 69-60 E 59-50 F 49-0 | |
| **Learning outcomes:**<br>Everyday phenomena are used for deeper and conceptual understanding of physics problem. | |
| **Brief outline of the course:**<br>1.Mechanics<br>•Coriolisova force<br>•How Swing works<br>•Bicycle<br>•Tides<br>•Inertia<br>2.Hydromechanics<br>•Archimedes screw<br>•Water flow<br>•Archimedes principle in Action<br>3.Kapilarity<br>•Water in plant<br>•Kapilár hysteresis<br>•Bubbles and soap<br>•Floating on water surface<br>4.Acoustic<br>•Signal production<br>•Human voice<br>•Space acoustic<br>•Home ciname<br>5.Optics<br>•Sight<br>•Opticalillusions | |

•Space imaging
•Atmospheric acoustic
6.Probléms IYPT
•Magnetohydrodynamics
•Bulbs
•Falling spring
•Ship movement
•Thermal exchange
7.Differenct problems
•Sonoluminiscence
•Ice pick
•Kelvin water droplet
•Water stain
8.Student work presentation

**Recommended literature:**

1. Walker, J.: The Flying Circus of Physics with answers, John Wiley &Sons, 2005
2. Gnädig, P., Honyek, G., Riley, K.: 200 Puzzling Physics Problems with Hints and Solutions, Cambridge University Press, 2001
3. Stepans, J.: Targeting Studnets ` Misconceptions, Showboard, 2003
4. Swartz, C.: Back of the Envelope Physics, The John Hopkins Uni. Press, Baltimore, 2003
5. Nahodil, J.: Fyzika v bežnom živote, Prometheus, Praha, 1996
6. Tulčinskyj, : Zbierka kvalitatívnych úloh z fyziky, SPN, Bratislava, 1990
7. Kašpar, E. : Problémové vyučovanie a problémové úlohy, SPN, Praha1982
8. Feynman, R.P. : Feynmanove prednášky z fyziky 1-5, Alfa, 1985
9. Landau, Kitajgorodskij : Fyzika pre každého, Alfa 1972
10. Lange, V.: To chce vtip!, Alfa, Bratislava, 1988
actual articles

**Course language:**
Slovak, English

**Notes:**

**Course assessment**
Total number of assessed students: 0

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

**Provides:** doc. RNDr. Marián Kireš, PhD.

**Date of last modification:** 15.02.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KSSFaK/VSJU/15 | **Course name:** Slovak Language for Teachers |
|---|---|

**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:** 1., 3.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Conditions for successful completion of the course:
a) regular active participation in seminars,
b) preparation of basic literature and content of lectures,
c) elaboration of seminar work / creative task,
d) successful completion of the final test.
Conditions for obtaining the final evaluation: a) seminar work / creative task b) final test (min. 56%) Final evaluation: 100,00 - 92,00% A 91,99 - 83,00% B 82,99 - 74,00 % C 73.99 - 65.00% D 64.99 - 56.00% E 55.99% and less FX
Prerequisites for successful completion of the course are annually updated on the electronic bulletin board in AIS2.

**Learning outcomes:**
During the final evaluation, the student demonstrates adequate mastery of the content standard of the course, which is defined by the required literature and seminar content, and demonstrates mastery of the performance standard, within which the student is able to practically apply the standard of standard Slovak in oral and written communications. manuals, gain skill in the bibliographic and citation standard. The graduate of the course normatively masters written communication on the basis of current orthographic rules and knows the basic characteristics of the means of expression of the text and functional language style.

**Brief outline of the course:**
Characteristics of basic terms of general linguistics (language – speech, language functions, the sign character of language, language levels, content and form in language, individual and general aspect of language units) on interdisciplinary background and with the application to Slovak as a national language. Language standard, codification, usus. Basic codification manuals. Application of orthographic rules in practical documents. Sound culture, pronunciation styles. Orthoepic phenomena in vowels and consonants. Application of rhythmic law and its exceptions. Assimilation and its specific features in Slovak. Style, stylization – methods and demonstration of structure of text components.

**Recommended literature:**
BÓNOVÁ, I. - JASINSKÁ, L.: Jazyková kultúra nielen pre lingvistov. Košice: UPJŠ 2019. 100 s.

FINDRA, J.: Štylistika slovenčiny. Martin : Osveta, 2004.
FINDRA, J.: Štylistika slovenčiny v cvičeniach. Martin : Osveta, 2005.
KRÁĽ, Á.: Pravidlá slovenskej výslovnosti. Martin: Matica slovenská 2006. 423 s.
Krátky slovník slovenského jazyka. Martin: Matica slovenská 2020.
SABOL, J.- SLANČOVÁ, D. - SOKOLOVÁ, M.: Kultúra hovoreného slova. Prešov, FF UPJŠ 1989.
Pravidlá slovenského pravopisu. Bratislava: Veda 2000 (2013).
SABOL, J. – BÓNOVÁ, I. – SOKOLOVÁ, M.: Kultúra hovoreného prejavu. Prešov: FF PU 2006.
SLANČOVÁ, D.: Praktická štylistika. 2., upravené a doplnené vydanie. Prešov: Slovacontact 1996. 178 s. ISBN 80-901417-9-X.
Slovník súčasného slovenského jazyka. Bratislava: Veda 2006.
Slovník súčasného slovenského jazyka. Bratislava: Veda 2011.
Slovník súčasného slovenského jazyka. Bratislava: Veda 2015.

**Course language:**
Slovak language

**Notes:**

**Course assessment**
Total number of assessed students: 161

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 15.53 | 23.6 | 30.43 | 14.29 | 13.66 | 2.48 |

**Provides:** PhDr. Iveta Bónová, PhD., univerzitná docentka, PhDr. Lucia Jasinská, PhD.

**Date of last modification:** 24.06.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

**COURSE INFORMATION LETTER**

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** ÚFV/ FKS/22 | **Course name:** Solid State Physics |

**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:** 1.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
Sucessfull passing the course requires presentation of adequate knowledge of concepts, phenomena and laws from Condensed Matter Physics. Knowledge of structural, mechanic, electric, thermal, transport and magnetic properties of solids and potetail possibilities of their practical applications. The number of credits reflects the extent of the course (2 hours of lectures) and the fact that the contents of the course represents part of state exam in magister degree.
During semester students will prepare two written works on the given topic and they will actively participate in the final debate on the topics which are identical to the content of the lectures. Treshold for for sucessfull passing the course is 50 % of the sum of obtained scores from the tests and oral exam. Maximal total score from both tests represents 30 % from the total score.
The scale of the total score is defined as follows:
A 100-91%
B 90-81%
C 80-71%
D 70-61%
E 60-50%
Fx 49-0%

**Learning outcomes:**
Sucessfull passing the course will significantly contribute to the expertise of the teacher in physics. Student will learn basic concepts in Condensed matter physics and understand phenomena in solids. He will also learn selected theoretical approaches and used experimental techniques in Condensed matter physics. In addition, he will also be able to interpret simple experimental observations based on quantum-mechanical phenomena.

**Brief outline of the course:**
1.week: Structure of crystals. Amorphous materials. Space and crystal lattice, elementar cell. Bravais lattices and crystallographic systems. Directions and planes in a crystal lattice – Miller´s indexes. Reciprocal lattice.
2. week Methods of structural analysis. Diffraction of X-ray radiation on crystals. Bragg´s equation and Laue´s condition, relation between them. Ewald´s construction for different experimental techniques.

3. week: Mechanical properties of solids and perturbations in crystal lattice. Classification of solids according to nature of bonding among elements in crystal lattice. Basic types of bondings (ion, covalent, metal, Van der Walls, hydrogen)
4. week: Thermal properties of solids – Einstein and Debye theory of specific heat. Eletrical properties of solids.
5. week: Sommerfield´s theory. Density of electronic states. Influence of temperature on the distribution of free electrons. Fermi – Dirac distribution function.
6. week: Electron in periodic potential. Energy spectrum of electrons in crystal. Kronig – Penney ´s model. Effective mass of electron.
7. week: Concept of holes. Semiconductors. Electrical conductivity of metals and semiconductors adopting properties of energy spectrum of electrons.
8. week: Transport properties in metals and semiconductors – Hall effect, magnetoresistance, photoconductivity, contact phenomena, quantum Hall effect.
9. week: Macroscopic quantum phenomena: Superconductivity and Superfluidity.
10. week: Magnetic properties of solids – orbital and spin magnetic moment of atom. Definition of basic magnetic quantities (magnetization, polarization, susceptibility, permeability). Vector model of atom.
11. Classification of magnetic materials according to nature of magnetic interactions. Diamagnetic and paramagnetic systems.
12 week: Basic properties of ferromagnets. Magnetic hysteresis, coercitive field. Domain structure, physical reasons ledaing to the domain structure.

**Recommended literature:**

H. Ibach, H. Lüth: Solid-State Physics. Springer - Verlag, Berlin, 1993.
Ch. Kittel: Introduction to Solid State Physics. John Wiley & Sons, Inc. 1976.

**Course language:**
Slovak, English

**Notes:**
The course is given in attendance form, if a need arises, online form using MS Teams can be adopted.

**Course assessment**
Total number of assessed students: 37

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 67.57 | 21.62 | 8.11 | 2.7 | 0.0 | 0.0 |

**Provides:** prof. RNDr. Peter Kollár, DrSc.

**Date of last modification:** 19.12.2022

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚFV/ SVKD/04 | **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:** 2., 4.

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

**Prerequisities:**

**Conditions for course completion:**
presentation of results of studnets´ research work at Students´ scientific conference

**Learning outcomes:**
Student gains experience and skills in processing and presentation of results of his research work.

**Brief outline of the course:**
Presentation of results of studnets´ research work at Students´ scientific conference.

**Recommended literature:**
Based on the recommendations of supervisor

**Course language:**
Slovak

**Notes:**

**Course assessment**
Total number of assessed students: 9

| abs | n |
|---|---|
| 100.0 | 0.0 |

**Provides:**

**Date of last modification:** 03.05.2015

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

| | |
|---|---|
| **University:** P. J. Šafárik University in Košice | |
| **Faculty:** Faculty of Science | |
| **Course ID:** KPE/ MPPa/15 | **Course name:** Supervised Teaching Practice |
| **Course type, scope and the method:**<br>**Course type:** Practice<br>**Recommended course-load (hours):**<br>**Per week: Per study period:** 36s<br>**Course method:** present | |
| **Number of ECTS credits:** 2 | |
| **Recommended semester/trimester of the course:** 1. | |
| **Course level:** II. | |
| **Prerequisities:** | |
| **Conditions for course completion:** | |
| **Learning outcomes:** | |
| **Brief outline of the course:** | |
| **Recommended literature:** | |
| **Course language:** | |
| **Notes:** | |

**Course assessment**
Total number of assessed students: 868

| abs | n |
|---|---|
| 100.0 | 0.0 |

| |
|---|
| **Provides:** doc. PhDr. Beata Gajdošová, PhD., doc. PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Vagaská, PhD. |
| **Date of last modification:** 14.09.2024 |
| **Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc. |

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPE/ PDU/15 | **Course name:** Teaching Methodology and Pedagogy |
|---|---|

**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:** 1.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**

**Learning outcomes:**

**Brief outline of the course:**

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 947

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 24.08 | 27.98 | 26.19 | 14.68 | 6.55 | 0.53 |

**Provides:** doc. PaedDr. Renáta Orosová, PhD., Mgr. Zuzana Vagaská, PhD.

**Date of last modification:** 18.09.2024

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** KPPaPZ/UPR/15 | **Course name:** The Art of Aiding by Verbal Exchange |
|---|---|

**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:** 2.

**Course level:** II.

**Prerequisities:**

**Conditions for course completion:**
1. Active participation in seminars
2. Elaboration and presentation of PPT presentation on the assigned topic. Maximum number of points 20; minimum number of points 11.
3. Final test in the range of 20 questions from selected chapters and lectures. Maximum number of points 20; minimum number of points 11. The final evaluation (mark) is the sum of points for the presentation and the test. A 40b - 37b B 36b - 33b C 32b - 29b D 28b - 25b E 24b - 21b FX 20b - 0b
The evaluation of the course and its subsequent completion will be based on clearly and objectively set requirements, which will be set in advance and will not change. The aim of the assessment is to ensure an objective and fair mapping of the student's knowledge while adhering to all ethical and moral standards. There is no tolerance for students' fraudulent behavior, whether in the teaching process or in the assessment process.

**Learning outcomes:**
Provide students with basic information about a systemic approach to helping. Train interviewing, clarify orders. Reflect on help options.
The student is able to demonstrate an understanding of the theoretical principles of conducting a helping conversation.
The student is able to describe, explain and evaluate in what context to use which of the selected techniques to help the interview with the individual.
The student is able to use basic selected techniques when working with an individual in the interview process.
The method of teaching the subject will be oriented to the student. Lecturers will be interested in students' needs, expectations and opinions so as to encourage them to think critically by expressing respect and feedback on their opinions and needs.
The content of the curriculum will be based on primary and high-quality sources that will reflect the topicality of the topics so as to ensure the connection of the curriculum with other subjects and also the connection of the curriculum with practice. Students will be expected to take an active approach in lectures and seminars with an emphasis on their independence and responsibility.

**Brief outline of the course:**

Psychological preparation for conducting an interview. Self-reflection of one's own possibilities, abilities to lead a conversation, to help. Possibilities of helping with conversations from the point of view of selected psychological approaches. Systematic approach to helping. Interview and professional ways to help and control. Objectivist and constructivist framework of conversation in theory and practice. Is it possible to help with control? Opening the interview, negotiating the course, course, ending the interview. Constructivist questions in the interview. Analysis of individual phases of conducting the interview. Reflex team possibilities of help in conversation. Models of reflective teams. Model situations of conducting an interview with an individual. Model situations of conducting an interview with a group. Professional possibilities, advantages and pitfalls of solving problems with an individual, with a group.

**Recommended literature:**

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 199

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 90.95 | 3.02 | 4.52 | 1.01 | 0.5 | 0.0 |

**Provides:** Mgr. Ondrej Kalina, PhD.

**Date of last modification:** 10.02.2025

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.

## COURSE INFORMATION LETTER

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

**Faculty:** Faculty of Science

| **Course ID:** ÚBEV/ ZOG1/03 | **Course name:** Zoogeography |
|---|---|

**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., 3.

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

**Prerequisities:**

**Conditions for course completion:**
Active participation in seminars.
Preparation of oral presentation to a selected topic.
Completion of two semestral written examinations.
Oral examination.

**Learning outcomes:**
The main goal of the subject is to get knowledge on the basic reasons of recent distribution of the animals on the Earth, zoogeographic regionalization of the Earth´s surface and human influence on the faunal distribution in the history.

**Brief outline of the course:**
This course will review our current understanding of the patterns of animal distribution and the processes that influence distributions of species and their attributes. Zoogeography will integrate information on the historical and current ecology, genetics, and physiology of animals and their interaction with environmental processes (continental drift, climate) in regulating geographic distributions. The course will emphasize descriptive and analytical approaches useful in hypothesis testing in zoogeography and will illustrate applied aspects of zoogeography (e.g. refuge design in conservation).

**Recommended literature:**
Buchar, J., 1983: Zoogeografie. SPN Praha
Darlington, P.J., 1998: Zoogeography: The geographical distribution of animals. Krieger, USA
Lomolino M.V., Brown J.H., Riddle B. R., 2005: Biogeography. Sinauer Associates, 1-845
Plesník, P., Zatkalík, F., 1996: Biogeografia. Vysokoškolské skriptá, PríFUK Bratislava

**Course language:**

**Notes:**

**Course assessment**
Total number of assessed students: 1033

| A | B | C | D | E | FX |
|---|---|---|---|---|---|
| 25.56 | 23.14 | 23.43 | 18.49 | 7.74 | 1.65 |

**Provides:** prof. RNDr. Ľubomír Kováč, CSc., RNDr. Natália Raschmanová, PhD., univerzitná docentka

**Date of last modification:** 10.12.2021

**Approved:** prof. PhDr. Oľga Orosová, CSc., doc. RNDr. Marcel Uhrin, PhD., univerzitný profesor, prof. RNDr. Peter Kollár, DrSc.