CONTENS

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KINF/AP/22 | **Name:** Computer architecture

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 1 **For the study period:** 26 / 0 / 13
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The course is completed by a written examination, for which students can obtain 50% of the total number of points. During the semester, students will take two written examinations for which they can earn 30% of the total points and 20% of the points can be earned by completing a semester project.
In addition to contact teaching, students prepare for practicals, prepare for written examinations, work on the semester project and prepare for the examination.
A grade of A requires a minimum of 90 points, a grade of B requires a minimum of 80 points, a grade of C requires a minimum of 70 points, a grade of D requires a minimum of 60 points, and a grade of E requires a minimum of 50 points. Credit will not be awarded to a student who scores less than 50 points.

Results of education:
Knowledge:
Upon completion of the course, the student will:
- has theoretical knowledge of computer architecture,
- knows the principle of operation of individual computer elements,
- has a deeper knowledge of Von-Neumann architecture.

Skills:
Upon completion of the course, the student will:
- is able to apply the acquired knowledge in solving practical problems,
- can analyze and solve simple and more complex problems,
- is able to design various logic circuits and implement them.

Competences:
Upon completion of the course the student:
- can work efficiently and implement the acquired theoretical knowledge,
- shows independence in solving more complex problems.

Brief syllabus:
1. The meaning of the term computer architecture and the significance of its different parts.
2. Boolean algebra, logical elements.
3. Logic circuits - their design and implementation.
4. Building blocks of digital systems.

5. Computer memory, registers.
6. Data types, mathematical operations, operand types, instruction formats, addressing.
7. Arithmetic-logic unit, instruction execution (instruction cycle).
8. Bus types, principle of operation, serial and parallel buses (FSB, PCI, PCIe, HT, QPI), their characteristics, data transfers, transfer rates, character systems.
9. Programming approach to I/O, I/O operations performed in memory unit, DMA, I/O channel.
10. Interrupt system - IRQ.
11. Principles of operation of DRAM, SRAM, ROM and EEPROM.
12. Virtual computer - construction, principles of operation.
13. Intel, AMD, IBM and ARM processors, their architectures, evolution and development trends.

Literature:

1. CSERNY, L. : Mikroszámítógépek. Budapest : LSI Oktatóközpont, 2003. s. 330. ISBN 963 577 188 6.
2. SIMA D. – FOUNTAIN, T. – KACSUK, P.: Korszerű számítógép-architektúrák tervezési tér megközelítésben. Bicske : SZAK Kiadó, 1998, s. 809. ISBN 963 9131 09 1.
3. TANNENBAUM, A. S.: Számítógéparchitektúrák. Budapest : Panem Kiadó, 2001, s. 720. ISBN 963 545 282 9.
4. BENYÓ B.: Számítógép architektúrája. Szécsényi István Egyetem. Győr. 2006. http://jegyzet.sze.hu/letolt.php?dwn=1szamitogepekar.
5. Antal, I.: Informatikai algoritmusok I. ELTE. Budapest. 2005. http://compalg.inf.elte.hu/~tony/Elektronikus/Informatikai/Infalg1H.xml.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Student workload distribution:
50% - attendance at tutorials, preparation for examinations and exams,
50% - study of literature, preparation of term papers.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: prof. András Molnár, PhD., Ing. Ondrej Takáč, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/BS/22	**Name:** Bachelor seminar

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 1 / 0 **For the study period:** 0 / 13 / 0
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Submission of a selected bibliography related to the topic of the final thesis and drafting of a part of the final thesis (10-12 pages).
Attendance at the seminar is compulsory. The student will prepare part of the final thesis and submit the bibliography.
The student must hand in the final paper to the tutor by the deadline.
If the student does not hand in the final part of the thesis within 7 days after the deadline, he/she will not receive the credits for the course.
The length of the part of the thesis to be handed in is determined by the instructor, the formal requirements are specified in the Rector's Directive 2/2021.
The essay must comply with the technical rules and ethics of citation.
The student's analytical-synthetic train of thought, the expression of personal opinion supported by theoretical knowledge, the definition of the problem and purpose of the essay, the way it is developed, the structure of the essay - logical structure and proportionate length of the individual sections, the work with literature and information sources (how they are selected and used), compliance with the basic formal requirements of the essay, compliance with the requirements for citation, the aesthetic and linguistic quality of the essay.

Results of education:
Knowledge:
The student can:
- list and explain the general requirements for the preparation of a final thesis, describe and characterise the content structure of the final thesis and its parts (introduction, main body, annexes),
- explain the concepts of phenomenon and fact, list and describe ways of investigating educational phenomena,
- to describe in more detail the basic methods of collecting and processing the data presented in the final report,
- identify the basic requirements for the author of a thesis, describe and describe the model, characteristics and structure of a thesis,
- list and explain the formal requirements for the final thesis,

- define the concept of an abstract, describe its structure, describe the characteristics of a quality abstract, list the most common mistakes in abstract preparation, distinguish an abstract from an annotation, an abstract, an abstract summary and an overview,
- explain the concepts of citation, quotation, paraphrase, compilation, plagiarism, distinguish between quotation and paraphrase, illustrate with examples the different citation and referencing techniques,
- define and interpret in their own words the basic concepts and motifs of the chosen subject area,
- know the basic terms used in the thesis,
- explain the terms used in an essay,
- construct (elaborate) the theoretical plane of the thesis, including all its important aspects,
- analyse and justify the conclusions of the thesis,
- critically analyse, re-evaluate and theorise the knowledge gained.

Skills:

The student can:
- write a draft of their own final thesis,
- explain the methodological rules for writing a final paper,
- define the main question and aim of the final thesis, formulating hypotheses where appropriate,
- plan a timetable for the preparation of the final thesis, including the content,
- work with literature (primary and secondary sources), search for information in library information databases,
- prepare the text of the final thesis, based on the knowledge acquired, by formulating ideas logically and accurately, creating a quality abstract, writing an introduction and conclusion, taking into account the criteria given,
- presenting the knowledge acquired in the field, recognising its complexity and drawing conclusions,
- apply knowledge of the ethics and techniques of citation and drafting,
- use correctly the various methods of citation and referencing and compile a bibliography correctly,
- create (develop) the practical aspects of the thesis, including all relevant aspects,
- analyse, synthesise and compare knowledge and propose solutions on this basis,
- draw conclusions through critical analysis and formulate their practical implications,
- critically analyse, reassess and apply the knowledge acquired in practice,
- present, discuss and argue their own knowledge in relation to the intended purpose of the thesis,
- be able to write a thesis on a chosen topic
- apply a critical approach,
- apply the principles of copyright, scientific ethics and relevant ISO and STN standards in the conduct of research

Competences:

The student:
- become aware of the importance of respecting academic ethics and the ethical implications for their own student and future teaching,
- act in accordance with the rules of good conduct,
- has mastered the basics of social appearance, and is dressed appropriately for the state examination,
- observes the ethical principles of summoning,
- Expresses his/her beliefs and opinions in a straightforward and honest manner, while accepting that the other party has the right to form his/her own opinion,
- bears and accepts the consequences of his/her own actions.

Brief syllabus:

1. Requirements for the final thesis in the SJE guidelines.
2. A concise description of the final thesis.
3. The importance of the final thesis
4. Selection of the topic for the final paper.
5. Preparation of a selected bibliography for the thesis.
6. Tasks and objectives of the final thesis.
7. Choosing the appropriate citation.
8. Content of the final thesis.
9. Formulating a strategy for the development of each section (chapter).
10. Working with textbooks and journals.
11. Use of the Internet and online publications.
12. preparing and carrying out the research, preparing the defence of the final thesis.

Literature:

1. ISO STN 690: Dokumentácia - Bibliografické odkazy – Obsah, forma a štruktúra. 1998.
2. KATUŠČÁK, D.: Ako písať záverečné a kvalifikačné práce. Nitra : Enigma, 2008, s. 164. ISBN 978 80 89132 45 4.
3. KIMLIČKA, Š.: Ako citovať a vytvárať zoznamy bibliografických odkazov : podľa noriem ISO 690 pre „klasické“ aj elektronické zdroje. Bratislava : Stimul, 2002, s. 82. ISBN 80-889-82-57-X.
4. Vnútorné predpisy UJS o záverečných prácach (zásady obsahovej náplne, štruktúra a formálna úprava záverečných prác). Dostupné v akademickom informačnom systéme univerzity: https://ais2.ujs.sk .

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Percentages for each task:
Work done in seminars: 20 %.
Seminar paper: 80 %.
The student must complete at least 50 % of all assignments.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: prof. RNDr. Tibor Kmeť, CSc.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ BCH1/22	**Name:** Biochemistry and molecular biology I.
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The condition for passing the subject is active participation in the seminars, which consists of a theoretical and practical part. During the practical part, the student will develop laboratory experiments focused on various biochemical topics: carbohydrates, lipids, enzymes, cellular respiration and fermentation, and photosynthesis. Practical experiments are completed by students in the laboratory and at home as homework; while these procedures will be simple and do not require sophisticated material and equipment, students can master these experiments later in their practice. The protocols will be documented with their photo documentation. At the end of the semester, the student submits reports to prepare the practical part of the subject for review. In the final part, the student proves his theoretical knowledge by completing a test from the theoretical part. Participation in the oral exam is conditional on achieving at least 50% of the points from the written examination. Final assessment: the share of the oral exam, written examination and protocols on the grade: 30% - 48% - 22%. Total student workload: 3 credits = 75-90 hours 26 hours of participation in contact lessons; 20 hours of preparation of protocols from laboratory experiments; 29-44 hours of self-study and preparation for the test and oral exam; The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: - A = 90-100% (90-100 points) - B = 80-89% (80-89 points) - C = 70-79% (70-79 points) - D = 60-69% (60-69 points) - E = 50-59% (50-59 points) - FX = 0 – 49% (0 – 49 points)	
Results of education: Knowledge: - The student can characterize the chemical composition of living organisms (saccharides, fatty acids, triacylglycerols, complex lipids, individual types of carbohydrates and lipids, and their most essential representatives) and energy processes in living organisms.	

- The student can characterize cell membranes' biological significance and structure by explaining the liquid mosaic model.
- The student can characterize the terms: enzyme, apoenzymes, coenzymes, cofactors, and vitamins.
- The student can characterize metabolic reactions in living systems, mitochondria and their biochemical processes, carbohydrate metabolism, and photosynthesis.

Abilities:
- The student can describe basic biochemical processes in living systems that relate to carbohydrates, lipids and enzymes.
- The student can apply his theoretical knowledge from lectures in practical experiments that he prepares at home, aiming to demonstrate biochemical processes in cells and organisms.
- The student can use his practical skills in school practice and his profession in the teaching process, in which the created protocols with photo documentation and a sufficient theoretical explanation of the experiment are helpful.

Competencies:
- The student has a positive attitude toward the subject due to understanding individual chemical processes from a biological point of view, bringing these processes closer to the human body and nature.
- The student has an overview of biochemical processes in the human organism, while he will use this knowledge to create his eating habits and the teaching process in creating a healthy lifestyle for children.
- The student has a positive attitude toward creating a healthy lifestyle.
- The student is responsible for the correct presentation of information regarding biochemical topics, including a healthy lifestyle, healthy diet, sports, vitamins, etc.
- The student is active in the pedagogical areas of education within his competencies; he is responsible for forming prejudices toward the subject of biochemistry by using his knowledge to demonstrate the importance of knowing these biochemical processes in nature in the case of plants, animals and humans as well as their importance in the food chain in the ecosystem.

Brief syllabus:

1. History of biochemistry, subject and content of biochemistry. Chemical composition of living organisms, the energetics of living organisms.
2. Carbohydrates: their structure. Biologically significant monosaccharides and their derivatives, formation of glycosidic bonds, significant di-, oligosaccharides and polysaccharides.
3. Lipids: fatty acids, triacylglycerols, their biological significance, prostaglandins, terpenes, carotenoids, sterols, fat-soluble vitamins, waxes.
4. Complex lipids, properties of biologically essential lipids, membranes, phosphoglycerols, liquid mosaic model, transport through membranes, and ion channels.
5. Enzymes: their characteristics, types, classification. Apoenzymes and coenzymes, cofactors, vitamins, speed of enzymatic reactions. Inhibition of enzyme reactions.
6. Metabolic reactions, metabolic turnover, anabolic, catabolic and amphibolic pathways, energy metabolism of the cell, oxidative phosphorylation, and respiratory chain.
7. Carbohydrate metabolism: anaerobic and aerobic glycolysis, citric acid cycle.
8. Pentose cycle, glyoxylate cycle, gluconeogenesis.
9. Photosynthesis, photosynthetic phosphorylation and carbon fixation. Photosystem I and II. Cyclic and non-cyclic photosynthetic phosphorylation, photosynthetic reactions independent of light.
10. Utilization of fatty acids, β-oxidation.
11. Biosynthesis of fatty acids, cholesterol – biosynthesis and types.
12. C3 and C4 plant types, CO_2 fixation in plants.
13. Repetition and summary of the curriculum.

Literature:

ÁDÁM, V.: Orvosi biokémia – 3. vyd. – Budapest: Medicina Könyvkiadó Rt., 2004 – 648 s. – ISBN 963 242 902 8.
BERG, J. M., TYMOCZKO, J. L., STRYER, L.: Biochemistry – 5. vyd. – New York, USA: W. H. Freeman, 2002. – 1100 s. – ISBN 978-0716746843.
ČURDA, M., MAŠTEROVÁ, V.: Biochémia – 3. vyd. – Prešov: Rokus, 2020. – 308 s. – ISBN 978-80-89510-81-8.
DE LENNART, E.: Táplálkozzunk okosan: Testünk biokémiai laboratóriuma – 1. vyd. – Budapest: Medicina Könyvkiadó Zrt., 2014. – 457 s. – ISBN 978 963 226 459 2.
HRABÁK, A.: Orvosi kémia és biokémia feladatgyűjtemény – 1. vyd. – Budapest: Semmelweis Kiadó, 2005. – 186 s. – ISBN 963 9214 80 9.
LAKATOŠ, B., ŠIMKOVIČ, M.: Biochémia: Návody na laboratórne cvičenia – 1. vyd. – Bratislava: STU, 2012. – 150 s. – ISBN 978-80-227-3793-7.
MANDL, J.: Biokémia : Aminosavak, peptidek, szenhidrátok, lipidek, nukleotidok, nukleinsavak, vitaminok és koenzimek szerkezete és tulajdonságai - 1. vyd. - Budapest : Semmelweis Kiadó, 2006. - 176 s. - ISBN 963 9656 18 6
PORÁČOVÁ, J., Nagy, M.: General and Applied Biochemistry for Natural-Sciences – 1. vyd. – Budapest: Műszaki Pedagógia Tanszék, 2021. – 223 s. – ISBN 978-963-421-847-0.
PORÁČOVÁ, J., VAŠKOVÁ, J., VAŠKO, L., NAGY. M.: Základné biochemické procesy organizmov – 1. vyd. – Prešov: Prešovská univerzita v Prešove, Fakulta humanitných a prírodných vied - 2015. – 343 s. – ISBN 978-80-555-1514-4.
RODWELL, V.: Harper´s Illustrated Biochemistry – 31. ed. – New York: McGraw-Hill, 2018. – 789 s. – ISBN 978-1-259-8379-7.
RONNER, P.: Netter´s essential biochemistry – 1. vyd. – Philadeplhia: Elsevier, 2018. – 482 s. – ISBN 978-1-929007-63-9.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 2

A	B	C	D	E	FX
0.0	0.0	50.0	50.0	0.0	0.0

Teacher: RNDr. Eva Tóthová Tarová, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ BCH2/22	**Name:** Biochemistry and molecular biology II.
Types, range and methods of educational activities: **Form of study:** Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 1 / 1 **For the study period:** 13 / 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 6.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The condition for passing the subject is active participation in the seminars and practical lessons, which consist of a theoretical and practical part. During the practical part, the student will develop laboratory experiments focused on various biochemical topics: proteins, nucleic acids, replication, transcription, translation and basic recombinant DNA techniques. Students complete practical experiments in the laboratory at home as homework; while these procedures will be simple and do not require complicated material and equipment, students will be able to master these experiments later in their practice. The protocols will be documented with their photo documentation. At the end of the semester, the student submits the reports to examine the practical part of the course (10%). In the final part, the student proves his theoretical knowledge by completing a test from the lecture part (50%). Participation in the oral exam is conditional on achieving at least 50% of the points from the written examination. Final assessment: share of an oral exam, written examination and protocols on the grade: 40% - 50% - 10%. Total student load: 2 credits = 50-60 hours Twenty-six hours of participation in contact classes; 10 hours of preparation of protocols from laboratory experiments; 14-24 hours of self-study and preparation for the test and oral exam; The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: - A = 90-100% (90-100 points) - B = 80-89% (80-89 points) - C = 70-79% (70-79 points) - D = 60-69% (60-69 points) - E = 50-59% (50-59 points) - FX = 0 – 49% (0 – 49 points)	
Results of education: Knowledge: - The student can describe amino acids and proteins and characterize their biological functions in living organisms.	

- The student can characterize the difference between the terms nucleoside and nucleotide and between the terms ribonucleotides and deoxyribonucleotides and describe the structure, forms and properties of nucleic acids, their primary, secondary and tertiary structure.
- The student can independently characterize the central dogma of molecular biology and its steps: replication, transcription and translation.
- The student knows the procedure and use of basic molecular methods of DNA study, such as PCR, electrophoresis, sequencing, transformation, transduction, and conjugation.

Abilities:
- The student can describe basic biochemical processes in living systems that relate to proteins and nucleic acids and their significance in nature, in plants, animals and humans.
- The student can characterize biochemical processes from transforming genetic information from DNA to transcription into the structure of proteins in living organisms.
- The student can explain the principles of basic molecular biology methods and their importance in genetics, medicine, the pharmaceutical and food industry, etc.
- The student can apply his theoretical knowledge from the seminars in practical experiments, which he will partially prepare at home and which are aimed at demonstrating the biochemical processes in the cell and organisms, and will subsequently use this knowledge in school practice and his profession in the teaching process.

Competencies:
- The student has a positive attitude toward the subject due to understanding individual chemical processes from a biological point of view, bringing these processes closer to the human body and nature.
- The student has an overview of biochemical processes in the human organism, and he will use this knowledge in creating his eating habits and the teaching process to create a healthy lifestyle for children.
- The student has a positive attitude toward creating a healthy lifestyle.
- The student has a positive attitude toward molecular methods in medicine by understanding the essence of these methods for use in genetic diagnostics, treatment and the food and pharmaceutical industry.
- The student also assumes responsibility for forming prejudices against various molecular techniques, genetic manipulations at the DNA level, and pharmaceutical and medical techniques using biological treatment.

Brief syllabus:

1. Proteins, their functions. Amino acids, properties of amino acids, their chemical reactions, peptide bonds.
2. Proteins - biologically essential proteins, protein classification, denaturation, reactions, structure, protein synthesis. Methods of studying protein structure.
3. Nucleic acids: nitrogenous bases, nucleoside, nucleotide, ribonucleotides and deoxyribonucleotides, their structure, forms and properties.
4. Denaturation of double-stranded DNA. Central dogma. DNA replication, semiconservative replication model.
5. Mechanism of replication: replication fork, types of DNA polymerases, other enzymes involved in DNA replication. Semidiscontinuous replication.
6. Ribonucleic acids: types of RNA - ribosomal, information and transfer ribonucleic acid, their structure and function, transcription of genetic information.
7. The essence of the genetic code. Model of an operon, inducer, repressor, promoter, regulator - Lac-operon model.
8. Translation: ribosomes and their parts, translation steps - initiation, elongation, termination. Basic methods of DNA study, PCR reaction, electrophoresis.

9. Mobile genetic elements, transposons, DNA polymorphisms. Sanger sequencing and the principle of automatic fluorescence sequencing.
10. Recombinant DNA techniques - recombination, transformation, transduction, conjugation
11. Mutagenesis, molecular cloning, human genome project, gene therapy, in vitro mutagenesis.
12. Metabolism of nitrogen compounds, the nitrogen cycle in nature.
13. Repetition and summary of the curriculum

Literature:

ÁDÁM, V.: Orvosi biokémia – 3. vyd. – Budapest: Medicina Könyvkiadó Rt., 2004 – 648 s. – ISBN 963 242 902 8.
BÁLINT, M.: Molekuláris biológia I. – 1. vyd. – Budapest: Műszaki Kiadó, 2006. – 206 s. – ISBN 963 16 2654 7.
BÁLINT, M.: Molekuláris biológia I. – 1. vyd. – Budapest: Műszaki Kiadó, 2006. – 207 s. – ISBN 963 16 2656 3.
BERG, J. M., TYMOCZKO, J. L., STRYER, L.: Biochemistry – 5. vyd. – New York, USA: W. H. Freeman, 2002. – 1100 s. – ISBN 978-0716746843.
ČURDA, M., MAŠTEROVÁ, V.: Biochémia – 3. vyd. – Prešov: Rokus, 2020. – 308 s. – ISBN 978-80-89510-81-8.
DE LENNART, E.: Táplálkozzunk okosan: Testünk biokémiai laboratóriuma – 1. vyd. – Budapest: Medicina Könyvkiadó Zrt., 2014. – 457 s. – ISBN 978 963 226 459 2.
GÁLOVÁ, Z., SALAJ, J., MATUŠÍKOVÁ, I.: Molekulárna biológia – 2. vyd. – Nitra: Slovenská poľnohospodárska univerzita, 2007. – 165 s. – ISBN 978-80-8069-951-2.
HRABÁK, A.: Orvosi kémia és biokémia feladatgyűjtemény – 1. vyd. – Budapest: Semmelweis Kiadó, 2005. – 186 s. – ISBN 963 9214 80 9.
LAKATOŠ, B., ŠIMKOVIČ, M.: Biochémia: Návody na laboratórne cvičenia – 1. vyd. – Bratislava: STU, 2012. – 150 s. – ISBN 978-80-227-3793-7.
MANDL, J.: Biokémia : Aminosavak, peptidek, szenhidrátok, lipidek, nukleotidok, nukleinsavak, vitaminok és koenzimek szerkezete és tulajdonságai - 1. vyd. - Budapest : Semmelweis Kiadó, 2006. - 176 s. - ISBN 963 9656 18 6
PORÁČOVÁ, J., NAGY, M.: General and Applied Biochemistry for Natural-Sciences – 1. vyd. – Budapest: Műszaki Pedagógia Tanszék, 2021. – 223 s. – ISBN 978-963-421-847-0.
PORÁČOVÁ, J., MARIYCHUK, R., NAGY. M. a kol.: Základné biochemické procesy organizmov – 1. vyd. – Prešov: Prešovská univerzita v Prešove, Fakulta humanitných a prírodných vied - 2015. – 343 s. – ISBN 978-80-555-1514-4.
PORÁČOVÁ, J., MARIYCHUK, R., NAGY. M. a kol.: Practical exercises in general and applied biochemistry - 1. vyd. - Užhorod : Lira, 2020. - 109 s. - ISBN 978-617-596-309-8.
RODWELL, V.: Harper´s Illustrated Biochemistry – 31. ed. – New York: McGraw-Hill, 2018. – 789 s. – ISBN 978-1-259-8379-7.
RONNER, P.: Netter´s essential biochemistry – 1. vyd. – Philadeplhia: Elsevier, 2018. – 482 s. – ISBN 978-1-929007-63-9.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: RNDr. Eva Tóthová Tarová, PhD.
Date of last update: 23.05.2022
Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ BE1/22	**Name:** Biodiversity and ecology of taxons I.

Types, range and methods of educational activities:
Form of study: Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 1 **For the study period:** 26 / 13
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 2.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The condition for passing the subject is active participation in the seminars and practical lessons, which consists of a theoretical and practical part. During the practical part, the student works in the laboratory on topics related to algology and mycology.
From the practical part, the student submits a report for inspection at the end of the semester. The submission of reports is a condition for passing the course. During the semester, the student passes four written examinations, two in microbiology and another two in algology and mycology (one in the middle of the semester, the other at the end of the semester). In the final part, the student proves his theoretical knowledge with an oral exam from both parts.
Final assessment: written examinations, and final exam on the grade: 50% - 50%.
Total student workload: 4 credits = 100-120 hours
39 hours of participation in contact lessons; 20 hours of preparation of protocols from laboratory experiments; 35-60 hours of self-study and preparation for tests and oral exams;
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
The theoretical part of the subject provides students with a general overview of the world of microorganisms, including cyanobacteria, algae, and fungi - their systematics, diversity, genetics, and practical consequences of their metabolic activity in medical, food, biotechnological and environmental applications. It can also provide an overview of viruses, their structure, and morphogenesis concerning the host organism.
Knowledge:
- The student knows the ecology and basics of the taxon system of viruses, bacteriophages, bacteria, protozoa, cyanobacteria, algae, fungal organisms, fungi, and lichens.

- The student can characterize prions, their origin, diseases caused by prions, viroids, structure, and related diseases.
- The student can describe the essential characteristics of viruses, bacteriophages, bacteria, and protozoa, their physiological and morphological features, and reproduction and recognize the diseases they cause in plants, animals, and humans.
- The student knows important representatives of taxonomic groups of cyanobacteria, algae, fungal organisms and fungi, their essential characteristics and importance in ecology, medicine and economic sectors.
- The student knows the concepts of virulence, pathogenicity, and basic immunological concepts; he can characterize the individual stages of the infectious process and the basic principles of vaccination and passive immunization.

Abilities:
- The student can distinguish the differences between morphological, anatomical and physiological characteristics between viruses, bacteria, protozoa, fungi and algae and classify them accordingly in taxonomic groups.
- The student can assign the causative agent to a specific disease and describe the mechanism of infection, symptoms and the procedure for treating the disease, regardless of the type of host (plants, animals, humans).
- The student can explain the origin and principle of antibiotic resistance and thus justify the importance of limiting the use of antibiotics and the importance of symbiotic bacteria for ecosystems and health.
- The student can prepare and examine preparations from moulds, yeasts and other organisms.

Competencies:
- The student has a positive attitude toward using microorganisms, cyanobacteria, algae, fungi, and lichens in the food industry, medicine, and biotechnology.
- The student has an overview of pathogenic and non-pathogenic microorganisms, which he can incorporate into practice in everyday life. In the teaching process, he can also explain and characterize the emergence of a specific disease caused by microorganisms, viruses, bacteria, protozoa or fungi.
- The student can explain to future generations the principle of infection by microorganisms, and last but not least, he can objectively describe the advantages and disadvantages of active immunization
- The student can explain the roles, importance and irreplaceability of the studied groups of organisms for the ecosystem and human society.
- The student is active in the pedagogical areas of education within his competencies; he takes responsibility for forming prejudices against microbiological techniques and scientific fields connected with microbiology.
- The student is responsible for correctly presenting information regarding microbiological topics, including vaccination, healthy lifestyle, composting, use of antibiotics, etc.
- The student has a responsible approach to building awareness among people around him on topics related to microbiology, bacteriology, virology, algology, and mycology.

Brief syllabus:

Microbiology seminar:

1. History of microbiology – ancient time, the middle ages, modern time, essential personalities of each era and their merit. Microbiology as a biological science - related scientific disciplines, types of microbiological sciences, applied microbiological sciences, and taxonomy of microorganisms.
2. Chemical composition, division of microorganisms, functional anatomy of prokaryotic and eukaryotic cells.

3. Prions - their origin, structure, meaning, prion diseases. Viroids - their characteristics and related diseases.
4. Viruses - history of virology, taxonomy, structure and morphology of viruses, replication of viruses, theories of the origin of viruses, viruses of prokaryotic and eukaryotic cells, the lytic and lysogenic cycle of bacteriophages.
5. Viruses of plants, invertebrates and vertebrates, essential viruses causing human and animal diseases, influenza virus - pandemics in the world, epidemiology.
6. Written the examination of prions, viroids and viruses.
7. Classification of prokaryotic microorganisms - Bacteria. History of bacteriology, origin and evolution of bacteria, their morphology and structure, way of life and metabolism, growth and reproduction of bacteria.
8. Importance of symbiotic bacteria, bacterial diseases of animals and humans, food poisoning, treatment of bacterial infections and resistance.
9. Protozoa - unicellular heterotrophic organisms systematics, economic and phylogenetic significant representatives. Their classes and the most famous representatives, diseases.
10. Virulence and pathogenicity. The emergence of an infectious state, types of infection, endo- and exotoxins.
11. Basic immunological terms, types of the immune system, active immunization, immune response, chemotherapeutics.
12. Written the examination of bacteria and Protozoa
13. Importance and distribution of microorganisms on Earth.
Seminar on algology and mycology:
1. Introduction to the system of algae, fungal organisms and fungi
2. Characteristics and ecology of taxons belonging to the subject of algology. Prokaryotic algae - System and ecology of Cyanophyta (Cyanobacteria),
3. Eukaryotic algae - Euglenophyta, Cryptophyta, Haptophyta, Dinophyta, Heterokontophyta,
4. Chlorophyta.
5. The importance of algae to nature
6. Characteristics and ecology of taxons belonging to the subject of mycology and lichenology. Acrasiomycota, Dictyosteliomycota, Myxomycota, Plasmodiophoromycota, Hyphochytridiomycota, Labyrinthulomycota
7. Oomycota, Chytridiomycota, Zygomycota,
8. Ascomycota,
9. Basidiomycota,
10. Deuteromycetes,
11. Lichenes
12. The importance of fungal organisms, fungi and lichens for nature.
13. Algae and fungi as essential bioindicators of the state of the environment (water quality, air quality)
Practice lessons - from algology and mycology:
1. Types of the thallus of cyanobacteria and algae
2. System and essential representatives of cyanobacteria Cyanophyta (Cyanobacteria),
3. System and important representatives of Euglenophyta, Cryptophyta, Haptophyta, Dinophyta, Heterokontophyta,
4. System and essential representatives of Chlorophyta
5. The importance of algae for human society
6. Review of the study with a written examination in algology and subcellular organisms
7. Types of thalli of fungal organisms and fungi

8. System and essential representatives of Acrasiomycota, Dictyosteliomycota, Myxomycota, Plasmodiophoromycota, Hyphochytridiomycota, Labyrinthulomycota, Oomycota, Chytridiomycota, Zygomycota
9. System and essential representatives of Ascomycota,
10. System and essential representatives of Basidiomycota,
11. System and essential representatives of Deuteromycetes, Lichenes
12. Study control by written examination in mycology, lichenology, bacteriology and protozoa
13. The importance of fungal organisms, fungi and lichens for human society

Literature:

KEVEI F. KUCSERA J.: Mikrobiológiai gyakorlatok I. 1. vyd. – Szeged: JATEPress, 2002, 134 s.
KEVEI F., KUCSERA J.: Mikrobiológia I. 1. vyd. – Szeged: JATEPress, 2002, 301 s.
KEVEI F., KUCSERA J.: Mikrobiológia II. 1. vyd. – Szeged: JATEPress, 1999, 226 s.
MAKOVICKÝ, P.: Mikrobiológia. 1. vyd. – Komárno: Univerzita J. Selyeho, 2018, 115 s., ISBN 978 80 8122 235 1.
BAČKOR M.: Systematika nižších rastlín: huby, lišajníky, machorasty. 1. vyd.- Košice: UPJŠ, 2007, 130. s. ISBN 978-80-7097-674-6
TUBA Z., SZERDAHELYI T., ENGLONER A.,: Botanika I. = Rendszertan: Bevezetés a növénytanbam algológiába, gombatanba és a funkcionális növényökológiába. 1. vyd. utánnyomás. – Budapest: Nemzedékek Tudása Tankönyvkiadó, 2013 – 280 s. – ISBN 978-963-19-5848-5.
TUBA Z., SZERDAHELYI T., ENGLONER A., NAGY J.: Botanika II. = Rendszertan: Bevezetés a növénytanbam algológiába, gombatanba és a funkcionális növényökológiába. 1. vyd. – Budapest: Nemzedékek Tudása Tankönyvkiadó, 2007. – 523 s. – ISBN 978-963-19-5849-2.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 20

A	B	C	D	E	FX
40.0	10.0	15.0	10.0	15.0	10.0

Teacher: RNDr. Eva Tóthová Tarová, PhD., Ing. Pavol Balázs, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ BE2/22	**Name:** Biodiversity and ecology of taxons II.

Types, range and methods of educational activities:
Form of study: Lecture / Seminar
Recommended extent of course (in hours):
Per week: 2 / 2 **For the study period:** 26 / 26
Methods of study: present

Number of credits: 6

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The condition for passing the subject is active participation in the lessons, which consist of a theoretical and practical part. There will be two written examinations during the semester. Completion of the subject is conditional upon successful completion of the interim examinations and the final oral and written examination. During the semester, students will make a presentation of their choice about one of the important families in Powerpoint; the relevance of the literature and the presentation itself will be evaluated.
Total student load: 6 credits = 150-175 hours
The student will participate in 52 hours of teaching. He works 25 hours on a Powerpoint presentation and 35-45 hours on preparation for one written examination.
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student knows the professional terminology of the scientific field.
- Can identify the basic conceptual, categorical and methodological apparatus of the subject.
- He has expanded his knowledge in related sciences and understands and categorizes connections from other scientific disciplines.
- By completing the subject, he will learn and master the essential characteristics of bryophytes, ferns, gymnosperms and angiosperms.
- The student knows the importance and use of plants for human society.
Abilities:
- The student can identify and classify plants into higher taxons.
- The student can see the diversity of plants in ecological contexts.

Competencies
- The student has a positive attitude towards the diversity of plants in the wild.
- The student leads his environment to a diversified attitude towards economic, rare and invasive species.

Brief syllabus:

Seminar:
1., From the history of botany, - Taxonomic categories, hierarchical system
2., The main development directions of higher plants. - Hepatophyta, Anthocerotophyta, Bryophyta – characteristics of taxons,
3., Lycopodiophyta, Equisetophyta, Pteridophyta, characteristics of taxons,
4., Cycadophyta, Ginkgophyta, Gnetophyta, Pinophyta, characteristics of taxons,
5., Dicotyledonopsida: Magnoliidae, Ranunculidae, characteristics of taxons at the level of orders, families or even subfamilies
6.., Caryophillidae, Hamamelididae, characteristics of taxons at the level of orders, families or even subfamilies
7., Rosidae characteristics of taxons at the level of orders, families or even subfamilies
8., Dilleniidae characteristics of taxons at the level of orders, families or even subfamilies
9., Lamiidae, Asteridae characteristics of taxons at the level of orders, families or even subfamilies
10., Monocotyledonopsida: Alismatidae, Aridae, Liliidae characteristics of taxons at the level of orders, families or even subfamilies
11., Zingiberidae, Commelinidae, Arecidae characteristics of taxons at the level of orders, families or even subfamilies.
12., Extension of plants
13., Flora and vegetation. - The development of Slovakia's flora after the last glacial period. - Protection of the plant gene pool of Slovakia.

Practical lessons:
1., Basic sources of taxonomic information
2., Hepatophyta, Anthocerotophyta, Bryophyta - representatives, observation of bryophytes with a school microscope.
3., Lycopodiophyta, Equisetophyta, Pteridophyta, representatives, their importance in nature and for human society
4. Cycadophyta, Ginkgophyta, Gnetophyta, Pinophyta, representatives, their importance in nature and for human society
5. General characteristics of the department Magnoliophyta and the classes Dicotyledonopsida and Monocotyledonopsida
6. Examination of studies in written form from lectures and seminars
7., Magnoliophyta: Dicotyledonopsida: Magnoliidae, Ranunculidae, Caryophillidae, Hamamelididae, representatives, their importance in nature and for human society
8., Rosidae representatives, their importance in nature and for human society
9., Dilleniidae representatives, their importance in nature and for human society
10., Lamiidae, Asteridae representatives, their importance in nature and for human society
11., Monocotyledonopsida: Liliidae, Commelinidae, representatives, their importance in nature and for human society
12., Control of studies in written form, both from lectures and seminars
13., Alismatidae, Aridae, Zingiberidae, Arecidae, representatives, their importance in nature and for human society

Literature:

BALÁZS P., (2012): Základy systému krytosemenných rastlín – A zárvatermő növények rendszerének alapjai. Univerzita J. Selyeho – Selye János egyetem, Komárno ISBN 978-80-8122-054-8
GOJDIČOVÁ E., MÁRTONFI P., MÁRTONFIOVÁ L., (2008): Botanika-Cievnaté rastliny. Vydavateľstvo : Ústav vysokohorskej biológie Žilinskej univerzity ISBN 977808889223121
HORTOBÁGYI T., SIMON T., (red.) (1991): Növényföldrajz, társulástan és ökológia. Tankönyvkiadó Budapest. ISBN 963 18 3459
TUBA Z., SZERDAHELYI T., ENGLONEr A., NAGY J., (2007) : Botanika II. Rendszertan Nemzeti tankönyvkiadó, Budapest. ISBN : 978-963-19-5849-2

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 2

A	B	C	D	E	FX
0.0	50.0	50.0	0.0	0.0	0.0

Teacher: Ing. Pavol Balázs, PhD., Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ BE3/22	**Name:** Biodiversity and ecology of taxons III.

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 1 / 2 **For the study period:** 13 / 13 / 26
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 4.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The condition for passing the subject is active participation in the lessons, which consist of a theoretical and practical part.
During the practical part, the student works in the laboratory on topics related to the issue of invertebrates and the comparative anatomy of chordates. During the semester, the student passes four written examinations, two on the issue of invertebrates and the other two on the comparative anatomy of chordates. One examination is in the middle of the semester, the other at the end of the semester. During the examination period, the student is examined from the invertebrate system. In the final evaluation, written examinations and final oral exam on the system of invertebrates, the final grade is 50% - 50%.
Total student workload: 5 credits = 125-150 hours
The student will participate in contact hours in the range of 52 hours. Each written examination is prepared by self-study in 20-25 hours.
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student knows the basics of the professional terminology of the scientific field.
- The student can identify the subject's basic conceptual, categorical and methodological apparatus.
- The student knows the characteristics and basics of the system of taxonomic groups of invertebrates.
- The student knows selected species and their importance to human society.

- The student masters the phylogeny of individual systems of chordates, covering, supporting, muscular, nervous, digestive, vascular, respiratory, excretory, sexual and sensory organs.
Abilities:
- The student can classify biological material obtained from nature at the taxonomic level of classes, even lower in the case of insects.
- The student can see the diversity of invertebrates in ecological contexts.
Competencies
- The student has a positive attitude towards the diversity of invertebrates in the wild.
- The student understands the connections of the anatomical structure of higher chordate taxons.
- The student leads his surroundings to a diversified attitude towards the species of invertebrates.

Brief syllabus:

1., Metazoa - multicellular organisms. Porifera - general characteristics and system. Eumetazoa. Cnidaria - general characteristics and system.
2., Plathelminthes (Trematoda, Cestoda), Nematoda, system, economically and medically important species
3., Annelida (Oligochaeta, Hirundinoidea) - general characteristics and system.
4., Mollusca - general characteristics, system.
5., Arthropoda - general characteristics. Crustacea - crustaceans. system
6., Chilopoda – centipedes, Diplopoda – millipedes, general characteristics and system, Hexapoda – six-legged, general characteristics.
7., Parainsecta - general characteristics and system, Insecta - general characteristics, hemimetabola - general characteristics, the system of lower taxons.
8., Insecta - hemimetabola, holometabola - general characteristics and system of lower taxons.
9., Insecta - holometabola - general characteristics and system of lower taxons.
10., Arachnida - arachnids - general characteristics and system
11., Deuterostommia – second mouth, general characteristics. Echinodermata - echinoderms, Hemichordata - hemichordates, general characteristics and system
12., Chordata - chordates, lower chordates - Urochordata - tunicates, Cephalochordata - spearfish. - system.
13., Systematic zoology. Zoological system and nomenclature. The origin and development of the zoological system. Modern zoological systematics.
Practical lessons - invertebrates
1., Systematic zoology. Zoological system and nomenclature. The origin and development of the zoological system. Modern zoological systematics.
2., Metazoa - multicellular organisms. Porifera - general characteristics and ecology. Eumetazoa. Cnidaria - general characteristics and ecology, Plathelminthes (Trematoda, Cestoda), Nematoda general characteristics and their ecology.
3., Annelida (Oligochaeta, Hirundinoidea) - general characteristics and ecology.
4., Mollusca - general characteristics and ecology.
5., Arthropoda - general characteristics. Crustacea - crustaceans. General characteristics and ecology.
6., Study control
7., Chilopoda – centipedes, Diplopoda – millipedes, general characteristics and ecology, Hexapoda – six-legged, general characteristics.
8., Parainsecta - general characteristics and ecology, Insecta - general characteristics, hemimetabola - general characteristics, lower taxons and their ecology.
9., Insecta - hemimetabola, holometabola - general characteristics, lower taxons, and ecology.
10., Insecta - holometabola - general characteristics, lower taxons and ecology.
11., Arachnida - arachnids - general characteristics and their ecology

12., Deuterostommia – second mouth, general characteristics. Echinodermata - echinoderms, general characteristics and ecology, Hemichordata - hemichordates, general characteristics and ecology, Chordata - chordates, lower chordates - Urochordata - tunicates, General characteristics and ecology, Cephalochordata - lanceolate, general characteristics and ecology.
13., Study control
Seminar - comparative anatomy of chordates
1., Introduction to the comparative anatomy of chordates
2., Covering system of chordates
3., The support-movement system of chordates
4., Vascular system of chordates.
5. Excretory system of chordates.
6., Study control.
7., Respiratory system of chordates.
8., Genital system of chordates.
9., Sensory organs of chordates.
10., Nervous system of chordates.
11., Secondary body cavity. The digestive system of chordates.
12., Glands with internal secretion.
13., Study control.

Literature:

BELÁKOVÁ A., (1994): Rozmnožovanie a ontogenéza živočíchov. Vyd. UK, Bratislava ISBN 8022307319,1994.
BIHARI, Z. – CSORBA, G.: Magyarország emlőseinek atlasza. Kossuth Kiadó, 2007.
HORVÁTH L.,: Funkcionális anatómia.Nemzeti tankönyvkiadó, Budapest ,1988
KOVÁCS Zs.,, KRISKA Gy., MOLNÁR K., PÁLFIA Zs.,: Összehasonlító metszetanatómiai atlasz. Nemzeti Tankönyvkiadó, 2005.
KRISKA Gy., LŐW P.,: Biológia érettségire felkészítő. Állati szervezetek. Nemzeti Tankönyvkiadó, 222. o. + DVD, 2012
PECHENIK, J. E.: Biology of the Invertebrates. 6. vyd. - Boston : McGraw-Hill International, 2005. - 603s. - ISBN 978-0-07-128455-4.
PETŘVALSKÝ, V.: Zoológia. 3. vyd. - Nitra : Slovenská poľnohospodárska univerzita, 2010. 136 s. ISBN 978-80-552-0465-9.
UJHELYI, P.: A Kárpát-medence állatai. Kossuth Kiadó, 2005.
ZBORAY G., (szerk): Összehasonlító anatómiai praktikum I. - A gerinctelenek - Anamnia-Az alacsonyabbrendű gerincesek. Nemzeti Tankönyvkiadó, 2010.
ZBORAY G.,: Összehasonlító anatómiai praktikum II. Amniota- 1. vyd. - Budapest : Nemzeti Tankönyvkiadó, Budapest, ISBN 978-963-19-6000-6, 2007.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 2

A	B	C	D	E	FX
50.0	50.0	0.0	0.0	0.0	0.0

Teacher: Ing. Pavol Balázs, PhD., Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD.

Date of last update: 13.07.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ BE4T/22	**Name:** Biodiversity and ecology of taxons IV. and fieldwork in zoology and anthropology

Types, range and methods of educational activities:
Form of study: Lecture / Practical
Recommended extent of course (in hours):
Per week: 1 / 3 **For the study period:** 13 / 39
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 6.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The condition for passing the subject is active participation in classes and practical exercises in the field. During the semester, the student passes two written examinations (one in the middle of the semester, the other at the end of the semester). In the final part, the student will prove his theoretical knowledge with an oral exam on the system and ecology of vertebrates. Final assessment: Two written examinations together with the protocol will weigh 50% of the final grade, and the oral exam is another 50%. The student completes the practical part in the field, from which he also submits a protocol. Submission of a protocol is a condition for passing the subject.
Total student workload: 3 credits = 75-90 hours
The student will participate in contact teaching hours during the semester for 26 hours and the field exercise for another 26 hours (a total of 52 hours). He prepares for the written examinations by self-study in the range of 30-35 hours and prepares a protocol from the fieldwork.
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student knows the basics of the professional terminology of the scientific field.
- The student can identify the subject's basic conceptual, categorical and methodological apparatus.
- The student knows the characteristics and basics of the system of taxonomic groups of vertebrates.
- The student knows selected species and their importance to human society.

- The student controls the characteristics of individual lower taxons, especially orders and with examples.
Abilities:
- The student can observe terrestrial vertebrates in their habitats.
- The student can see the diversity of vertebrates in ecological contexts.
- The student will learn the basic skills of finding and recognising animals in the field.
- The student acquires knowledge of the systematic classification of individuals in the animal kingdom according to the characteristics of individual determining keys.
- The student will gain practical knowledge and experience from osteoanthropological research.
Competencies
- The student has a positive attitude towards the diversity of vertebrates in the wild.
- The student understands the context of the phylogeny of vertebrates.
- The student leads his surroundings to a diversified attitude towards the species of vertebrates.

Brief syllabus:

1.,Agnatha - system. - Gnathostomata – system of taxons: Placodermi, Acanthodii, Chondrichthyes system of lower taxons.
2nd, Osteichthyes – a system of lower taxons I.
3., Osteichthyes – system of lower taxons II.
4., Amphibia – a system of lower taxons.
5., Reptitia - a system of lower taxons.
6., Aves - a system of lower taxons I.
8., Aves - a system of lower taxons II.
9., Mammalia - a system of lower taxons I.
10., Mammalia - a system of lower taxons II.
11., Distribution of vertebrates on Earth
12., Behavior of vertebrates
13., Evolution and phytogenesis of vertebrates
exercise
1., Vertebrates - vertebrates (higher chordates) general characteristics.
2., Agnatha - general characteristics and ecology. - Gnathostomata – general characteristics and ecology. Placodermi, Acanthodii, - Chondrichthyes – general characteristics and ecology.
3., Osteichthyes – general characteristics and ecology.
4., Amphibia – general characteristics and ecology.
5., Reptitia - general characteristics and ecology.
6., Study control
7., Aves - general characteristics and ecology I.
8., Aves - general characteristics and ecology II.
9., Mammalia - general characteristics and ecology I.
10., Mammalia - general characteristics and ecology II.
11., The importance of vertebrates for human society
12., Study control
13., Protection of vertebrates in Slovakia
Fieldworks in the range of 5 days
Establishment of a collection of invertebrates, vertebrates and photo-documentary material of animals, collection and a systematic classification of animal species of selected biotopes, collection and a systematic classification of pests of cultivated plants. Familiarisation with the principles of osteoanthropological research, uncovering a burial site. Processing and identification of osteological material. Preparation of documentation from the excursion.

Literature:

BAKONYI G. (szerk). (2003): Állattan. Mezőgazda Kiadó. - Budapest : Mezőgazda Kiadó, 2003. - 718 s. - ISBN 963 286 044 6.)
BIHARI Z., CSORBA G., (2007): Magyarország emlőseinek atlasza. Kossuth Kiadó. 360 s. - ISBN 978-963-09-5610-9.).
ČIHÁK, R.: Anatomie I.-III. Avicenum Praha, 2001, 2002, 2004. ISBN 80-7169-970-5
CSÖRGŐ és mtsi szerk. (2009): Magyar madárvonulási atlasz. Kossuth Kiadó - 672 s. - ISBN 978-963-09-5865-3.).
DONÁTH T.: Anatómiai atlasz. - Budapest : Medicina Könyvkiadó, 2006. - 212 s. - ISBN 963 242 907 9.
FORRÓ L., (szerk) (2007): A Kárpát-medence állatvilágának kialakulása. Magyar Természettudományi Múzeum, Budapest. 399 s. - ISBN 9789637093999.).
H.BATTHA, L. Növények és rovarok preparálása . NATURA, 1978. - 191. - ISBN 963 233 046 3.
HARKA Á., SALLAI Z. (2004): Magyarország halfaunája : Képes határozó és elterjedési tájékoztató. Nimfea Természetvédelmi Egyesület. 269 s. - ISBN 963 86475 3 1
KRISKA Gy., LŐW P., (2012): Biológia érettségire felkészítő. Állati szervezetek. Nemzeti Tankönyvkiadó, 222. o. + DVD 223 s. - ISBN 978-963-19-7109-5.).
NAGY, M.: Természetismereti exkurziók : Nyugati úticélok / Melinda Nagy. - 1. vyd. - Komárom : Selye János Egyetem, 2010. - 81 s. - ISBN 978-80-89234-98-1.
NAGY, M.: Természetismereti exkurziók : Keleti úticélok / Melinda Nagy. - 1. vyd. - Komárom : Selye János Egyetem, 2010. - 92 s. - ISBN 978-80-8122-005-0.
STANĚK, V. J.: Veľký obrazový atlas zvierat, - 5. vyd. - Bratislava : Vydavateľstvo Mladé Letá, 1983. - 592s.
UJHELYI P., (szerk.) (2005): Élővilág enciklopédia I A Kárpát-medence állatai. Kossuth Kiadó, - 526 s. - ISBN 963 09 4745 5.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Ing. Pavol Balázs, PhD., Dr. habil. PaedDr. Melinda Nagy, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ BED/22	**Name:** Bioethics and volunteering
Types, range and methods of educational activities: **Form of study:** Lecture / Practical **Recommended extent of course (in hours):** **Per week:** 1 / 1 **For the study period:** 13 / 13 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The condition for passing the subject is active participation in the lessons, which consists of a theoretical part. To pass the subject, the student must write a test (50%) from the theoretical part during the exam period. The student will also prepare a seminar paper (50 points), which he will present himself. The seminar work will follow the theoretical part of the subject both thematically and in terms of content. The seminar paper must meet the content and formal requirements of scientific writing. Point distribution of the seminar work: interpretation of the situation//problem (10%), presentation of the literature review (10%), analysis and evaluation (10%), drawing conclusions and formulating proposals (10%), elaboration (10%). Total student workload: 3 credits = 75-90 hours Twenty-six hours of participation in contact classes; 20 hours of preparation of the educational activity project and tasks assigned in the lessons; 35-45 hours of self-study; The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: A = 90-100% (90-100 points) B = 80-89% (80-89 points) C = 70-79% (70-79 points) D = 60-69% (60-69 points) E = 50-59% (50-59 points) FX = 0-49% (0-49 points)	
Results of education: Knowledge: - The student knows the principles of biomedical ethics. - The student is ready to realistically convey the moral issues of the relationship between body and soul. - The student is familiar with the fundamental problems of green bioethics in our Anthropocene age. - The student is informed about the moral issues of environmental protection and globalization. - The student is familiar with the latest ethical research.	

- The student knows the importance of the results of biological scientific research in everyday life and its ethical consequences.
Abilities:
- The student can apply the acquired knowledge in the teaching-learning process of biology.
- The student can develop moral sensitivity in pupils.
- The student can convey the moral issue of life, respect and protection of nature.
- The student can recognize the moral relationship between actions and consequences.
- The student can recognize the connections of global responsibility.
- The student can raise awareness of the importance of ecological, value-based and sustainable behaviour based on love for nature and knowledge of the environment.
Competencies:
- The student has a positive attitude towards preserving the values of life, human life, natural beings, and a healthy and clean environment.
- The student is committed to developing a new perspective on life and values, not on modern consumer society's values.
- The student is open to voluntary work that contributes to individual development, teaches empathy, altruism and helpfulness, and helps to become a better person.
- The student is active in pedagogical areas of education within his competencies; he takes responsibility for forming prejudices against bioethical issues and scientific fields connected with bioethics and volunteering.

Brief syllabus:

1. Concept, subject, morality and law of ethics, bioethics as a discipline.
2. Principles of biomedical ethics, autonomy, justice, health credibility. Personal data protection in healthcare. The ethical dimension of the doctor-patient relationship.
3. Ethics of reproductive procedures. Bioethical aspects of the beginning of human life. Contraception: contraception, abortion. Artificial insemination, fetal transplantation-surrogate motherhood; sterilization.
4. Ethical challenges in gerontology. Bioethical aspects of the end of human life. Dying and human dignity. Euthanasia, palliative medicine.
5. Ethical and legal aspects of organ transplantation. Brain death.
6. Ethical aspects of treatment and research. Declaration of Helsinki on Ethical Principles of Medical Research on Humans.
7. Ethical issues of human breeding (eugenics). Cloning.
8. Green bioethics - the concept of ecological ethics. Ethical issues of environmental sustainability.
9. The common heritage of humanity and the rights of future generations. Responsibility for the future, responsibility for the living world. Global issues - personal responsibility. Volunteering and the social-community benefit of volunteering.
10. Obligations and moral prohibitions in handling animals. Ethical imperatives of animal experiments.
11. Ethical issues in biotechnological interventions.
12. Ethical problems of scientific progress, research ethics.
13. Test writing

Literature:

BALÁZS, P.: Bioetika : Az emberi élet erkölcsteológiája. 1. vyd. - Veszprém : VEK -Veszprémi Egyetemi Kiadó, 1995. 53 s.
Bioetikai Kódex. Az orvosbiológiai/klinikai kutatások elveiről és gyakorlatáról. 2022. Egészségügyi Tudományos Tanács https://ett.aeek.hu/bioetikai-kodex/

FRANCIS FUKUYAMA .: Our Posthuman Future : consequences of the biotechnology revolution. - 1.vyd. - London : Profile Books, 2002. - 256 s. - ISBN 1 86197 297 0.
GAIZLER, G.: Bioetika. 1. vyd. - Budapest, 1999. 285 s.
KOVÁCS József: Bioetikai kérdések a pszichiátriában és a pszichoterápiában. Budapest, 2006, http://real-d.mtak.hu/347/1/Kovacs_Jozsef.pdf
LŐW Péter: Bevezetés a bioetikába, 2014, ELTE
Magyar Bioetikai Szemle Hungarian Review of Bioethics, 2015/1.http://bioetikai-tarsasag.hu/docs/szemle/BIOETIKA-FUZET-boritoval-2015_1-.pdf
MAKÓ, J. – ULLRICH, Z.: Bioetika – Ökumené. Budapest : Széphalom Könyvműhely, 2003. 332. - ISBN 963 9373 44 3. VARGHA, B.: Eutanázia. - Komárno : Selye János Egyetem, 2011. - DM.4504-TF.11.29B.2B. 74 s

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 2

A	B	C	D	E	FX
0.0	50.0	0.0	50.0	0.0	0.0

Teacher: Dr. habil. PaedDr. Melinda Nagy, PhD., Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD., Ing. Iveta Szenciová, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ BPO/22	**Name:** Biopolitics
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 6.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The condition for passing the subject is active participation in the lessons, which consists of a theoretical and practical part. As part of the practical part, the student will have to prepare a seminar paper based on the knowledge he acquired while teaching the subject. The seminar work will consist of professional terms and topics of a biopolitical nature. The seminar paper must meet the content and formal requirements of scientific writing. At the end of the semester, the student submits the seminar work for review and presents it as a presentation (20%). During the exam period, the student writes a test on theoretical knowledge (80%). Total student load: 1 credit = 25-30 hours 26 hours of participation in contact lessons; 4 hours of preparation of the project of the educational activity and tasks assigned in the lessons The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: - A = 90-100% (90-100 points) - B = 80-89% (80-89 points) - C = 70-79% (70-79 points) - D = 60-69% (60-69 points) - E = 50-59% (50-59 points) - FX = 0 – 49% (0 – 49 points)	
Results of education: The student acquires new knowledge about biopolitics, expands knowledge of technical terms and can understand ecological and political contexts. Knowledge: - The student can apply the acquired knowledge in the teaching-learning process of biology. - The student will become familiar with biopolitics as a direction, its meaning and the correct application of biopolitical procedures and their application in the EU. - The student will expand his knowledge about environmental protection, ecology and principles of application of the standard European policy. Abilities:	

- The student can understand political concepts, procedures, and valid legislative standards in ecology, agriculture and the environment.
- The student can develop a complex seminar work and use the knowledge from it in practice.
- The student can understand biotechnological procedures.
- The student can use the acquired knowledge in practice and is also able to interpret it for other persons or students in the future teaching process.
Competencies:
- The student will develop a more positive relationship and understanding of ecological and political environmental protection issues and will gain more self-confidence in his abilities.
- A better understanding of individual biopolitical aspects gives the student lifelong knowledge that will positively affect his attitude towards nature and the environment.
- The student is active in pedagogical areas of education within his competencies and takes responsibility for forming prejudices against biopolitical procedures and their effective use in practice.

Brief syllabus:
1. Basic concepts of biopolitics.
2. Climatology and elemental climate pacts
3. Ecological procedures and systems
4. Climate changes and their impact on the environment
5. Activity of international organisations in the field of climate change
6. Diplomacy and international law in the field of biopolitics
7. Modern biotechnologies and their distribution
8. Impact of biotechnology on the environment
9. Bioarchitecture in human settlements
10. State of the environment in Central Europe and our region
11. State of the environment in the world and the most significant challenges
12. Presentation and submission of the seminar work
13. Presentation and submission of the seminar work

Literature:
BARTHA D.: Természetvédelmi élőhelyismeret. - 1. vyd. - Budapest : Mezőgazda Kiadó, 2013. - 213 s. - ISBN 978-963-286-691-8.
MEZEI C. - ,BAKUCZ M.: Agrárátalakulás,környezeti változások és regionális fejlődés: Tanulmányok Buday-Sántha Attila 70. születésnapjára. - 1. vyd. - Pécsi Tudományegyetem : Molnár Nyomda és Kiadó Kft., 2011. - 508 s. - ISBN 978 963 642 401 5.
BÁNDI GY.: A környezetvédelmének joga - környezetjog - 1. vyd. - Budapest, 1995. - 88 s.
BALOGH J., NEMES CS.: A biológiai sokféleség állapota és védelme Magyarországon- 1. vyd. - Budapest : Fenntartható Fejlődés Bizottság, 1998. - 115 s. - ISBN 963 03 4462 9.
KERÉNYI A.: Európa természet- és környezetvédelme. - 1. vyd. - Budapest : Nemzeti Tankönyvkiadó, 2003. - 534 s. - ISBN 963 19 3502 7.
SALLAI R. B.: Zöldszemmel : Túrkeve : "Nimfea" Természetvédelmi Egyesület, 2003. - 232 s. - ISBN 9630356935.
ŠÍBL, J.: Restoration of the Wetlands of Záhorie Lowland. - 1. vyd. - Banská Bystrica - Bratislava : Štátna ochrana prírody - BROZ, 2008. - 21 s. - ISBN 978-80-89310-53-1.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 0

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

Teacher: Ing. Iveta Szencziová, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ BS-B/22	**Name:** Bachelor's Thesis Seminar
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 4	
Recommended semester/trimester of study: 5.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Submission of a selected bibliography related to the topic of the Bachelor thesis and drafting of a part of the Bachelor thesis (10-12 pages). Attendance at the seminar is compulsory. The student prepares part of the Bachelor thesis and submits the bibliography. The student must hand in a ready part of the thesis to the tutor by the deadline. If the student does not hand in the ready part of the thesis within 7 days after the deadline, he/she will not receive the credits for the course. The length of the ready part of the thesis to be handed in is determined by the tutor, the formal requirements are specified in the Rector's Directive 2/2021. The work must comply with the technical rules and ethics of citation. Criteria for the evaluation of the work: – the student's analytical-synthetic thought process, – expression of personal opinion supported by theoretical knowledge, – the definition of the problem and the aim of the work, the way in which it has been developed, – the structure of the work - logical structure and proportional length of each part, – work with literature and sources of information (how they are selected and used), – compliance with the basic formal requirements of the essay, compliance with citation requirements, – aesthetic and linguistic quality of the essay. Percentages for each task: Work done in seminars: 20 %. Seminar paper: 80 %. The student must complete at least 50 % of all assignments.	
Results of education: Knowledge: The student is able to: - list and explain the general requirements for the preparation of the Bachelor thesis, describe and characterize the content structure of the Bachelor thesis and its parts (introduction, main body, appendices),	

- explain the concepts of phenomenon and fact, list and describe ways of investigating educational phenomena,
- describe in more detail the main methods of collecting and processing the data presented in the Bachelor thesis,
- identify the basic requirements for the author of a thesis, describe and characterise the model, characteristics and formal structure of a thesis,
- list and explain the formal requirements for the Bachelor thesis,
- define the concept of an abstract, describe its structure, describe the characteristics of a quality abstract, list the most common mistakes in abstract preparation, distinguish between an abstract and an annotation, an extract, a summary and an overview,
- explain the concepts of citation, quotation, paraphrasing, compilation, plagiarism, distinguish between quotating and paraphrasing, and illustrate different citation and referencing techniques with examples,
- define and interpret in his (her) own words the basic concepts and motifs of the chosen subject area,
- be familair with the basic terms used in the thesis,
- explain thebasic terms used in an essay,
- construct (elaborate) the theoretical plane of the thesis, including all its important aspects,
- analyse and justify the conclusions of the thesis,
- critically analyse, re-evaluate and use in theory the knowledge gained.

Skills:

The student is able to:
- write a draft of his (her) own Bachelor thesis,
- explain the methodological rules for writing a Bachelor thesis,
- define the main question and the aim of the thesis, formulate hypotheses where appropriate,
- plan a timetable for the preparation of the Bachelor thesis, including its table of contents,
- work with literature (primary and secondary sources), search for information in library information databases,
- prepare the text of the Bachelor thesis, based on the knowledge acquired, by formulating ideas in a logical and precise way, producing a quality abstract, writing an introduction and conclusion, taking into account the criteria given,
- present the knowledge acquired in the field, recognising its complexity and drawing conclusions,
- apply knowledge of the ethics and techniques of citation and drafting,
- use correctly the various methods of citation and referencing and compile a bibliography correctly,
- create (develop) the practical aspects of the thesis, including all relevant aspects,
- analyse, synthesise and compare knowledge and propose solutions on this basis,
- draw conclusions and formulate practical implications through critical analysis,
- critically analyse, reassess and apply the knowledge acquired in practice,
- present, discuss and support the ideas with proper arguments, while writing the thesis,
- present, in a group of students and in the presence of the tutor, the outputs of the activity and justify their relevance and practical use,
- complete the Bachelor thesis and prepare for its public defence,
- to grade the strengths and weaknesses of the topic of the thesis and the thesis itself,
- critically evaluate the methods and procedures used in the thesis and make suggestions for their practical application,
- acquire independent knowledge in the chosen field,
- apply theoretical knowledge to teaching practice.

Competences:
The student
- is aware of the importance of respecting academic ethics and the ethical implications for his/her own student and future teaching activities,
- acts in accordance with the rules of good conduct,
- has mastered the basics of social appearance, and is dressed appropriately for the state examination,
- adheres to the wthical principles of citation
- expresses his/her beliefs and opinions in a straightforward and honest manner, while accepting that the other party has the right to form his/her own opinion,
- bears and accepts the consequences of his/her own actions.

Brief syllabus:

1. Requirements for the Bachelor thesis in the SJE guidelines.
2. A concise description of the Bachelor thesis.
3. The importance of the Bachelor thesis
4. Selection of the topic for the Bachelor thesis.
5. Preparation of a selected bibliography for the thesis.
6. Tasks and objectives of the Bachelor thesis.
7. Choosing the appropriate citation.
8. Content of the Bachelor thesis.
9. Formulating a strategy for the development of each part (chapter).
10. Working with reference books and journals.
11. Use of the Internet and online publications.
12. Preparing and carrying out the research, and getting ready for the defence of the Bachelor thesis.

Literature:

A magyar helyesírás szabályai. 2015. Budapest: Akadémiai Kiadó. 12. kiadás. ISBN 978 963 05 9631 2
ECCO, U.: Hogyan írjunk szakdolgozatot? Kairosz, 1987. - 255. - ISBN 9639137537
CHAJDIAK, J.: Štatistika jednoducho v Exceli. - 1. vyd. - Bratislava : Statis, 2013. - 340 s. - ISBN 978-80-85659-74-0.
KATUŠČÁK, D.: Ako písať záverečné a kvalifikačné práce. 5. vyd. - Nitra : Enigma, 2007. - 164 s. - ISBN 978-80-89132-45-4
MADARÁSOVÁ, J. (red.) 2000. Pravidlá slovenského pravopisu. Bratislava: VEDA. ISBN 8022406554
MARKO J.: Ako písať záverečnú prácu. - 1. vyd. - Zvolen : TU, 2010. - 66 s. - ISBN 978-80-228-2112-4.
MURRAY R.: How to Write a Thesis - 3. vyd. - England : McGraw-Hill Open University Press, 2011. - 326 s. - ISBN 978-0-33-524428-7.
NAGY-GYÖRGY, J.: Valószínűségszámítás és statisztika példatár : POLYGON Jegyzettár - 1.vyd. - Szeged : Szegedi Egyetemi Kiadó POLYGON, 2010. - 111 s.
SILVERMAN, D.: Ako robiť kvalitatívny výskum /. - Bratislava : Ikar a.s., 2005. - 328 s. – ISBN 80-551-0904-4.
Smernica rektora č. 2/2021 o úprave, registrácii, sprístupnení a archivácii záverečných, rigoróznych a habilitačných prác na Univerzite J. Selyeho. 2021. Komárno: UJS

Language, knowledge of which is necessary to complete a course:

Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Ing. Pavol Balázs, PhD., Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD., Dr. habil. PaedDr. Melinda Nagy, PhD., Ing. Iveta Szencziová, PhD., RNDr. Eva Tóthová Tarová, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ CHM1/22	**Name:** Chemistry I.
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar **Recommended extent of course (in hours):** **Per week:** 1 / 1 **For the study period:** 13 / 13 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Within the seminars, student presentations on selected topics are also evaluated; at the same time, during the semester, the student continuously works on a seminar paper, which he submits at the end of the seminar. Completion of the subject is conditional on successfully passing the interim (40 points) and final written examination (60 points). Participation in the final examination is conditional on achieving at least 50% of the points (min. 20 points) from the interim examination. The final evaluation of the subject results from the evaluation and the summary written examination are as follows: Final grade=(0.2 x average % of success on the presentation of the topic + 0.3 x % evaluation of the seminar work + 2.5 x % of success from written examinations) / 3. Total student workload: 3 credits = 75-90 hours The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: - A = 90-100% (90-100 points) - B = 80-89% (80-89 points) - C = 70-79% (70-79 points) - D = 60-69% (60-69 points) - E = 50-59% (50-59 points) - FX = 0 – 49% (0 – 49 points)	
Results of education: After completing the subject, the student: Knowledge: - becomes familiar with the basic laws and regularities of life on Earth; - understands the structure of atoms and molecules, as well as the empirical laws of chemistry; - understands the process of formation of bonds between atoms, understands the importance of intermolecular interactions in biological systems; - becomes familiar with the states of matter and their properties, as well as the regularities of the periodic system of elements; - thanks to the knowledge of the structure of atoms and molecules, he can interpret the course of chemical reactions;	

- as part of learning about chemical reactions, he will learn the regularities of equilibrium states, which play an essential role in biological living systems;
- becomes familiar with the theory of acids and bases and understands the principle of acid-base reactions, which are essential in everyday life and individual biological processes.
Abilities:
- with the help of the knowledge acquired during the course, the graduate can understand the more complex laws of chemistry, which are also applied in biology;
- understands the complex interrelationships between individual fields of chemistry and biology;
- knows how to use the periodic table of elements to determine the properties of elements;
- can modify simple chemical reactions;
- can routinely and expertly use concepts important for everyday life (e.g., acidity, alkalinity).
Competencies:
- tries to understand the primary chemical and physical relationships important in biological systems;
- strives for accurate and professional use of chemical and biological terms;
- can independently interpret basic natural phenomena
- after successful completion of the subject, the student will acquire basic general and inorganic chemistry with an emphasis on the competence of using this knowledge in the practice of a future biology teacher.

Brief syllabus:

1. Introduction, general concepts, and the subject of chemistry. Substance, system, pure substance, mass, weight, energy, chemical element, compound, fundamental laws, and regularities of chemistry.
2. Structure of an atom, elementary particles of substances, proton, nucleon number, amount of matter, molar mass, chemical formulas, and equations.
3. Periodic table of elements, periodic law, the electron configuration of atoms
4. Formation of a chemical bond, types of a chemical bond, covalent and ionic bond, weak intermolecular interactions - their role in biological living systems.
5. State of matter (gas, liquid, and solid-state), characteristics, and properties.
6. Solutions. Ways of expressing the composition of solutions.
7. Diffusion and osmosis - their role in living organisms
8. Chemical reactions. Classification of chemical reactions, oxidation-reduction reactions, electrode processes, standard electrode potentials, galvanic cells, electrolysis.
9. Theory of acids and bases, acid-base reactions, solution pH, neutralization, hydrolysis, acid-base titrations.
10. Rate of chemical reaction, catalysis, biocatalysts.
11. Chemical equilibrium, equilibrium constants of chemical reactions.
12. Written verification
13. Chemical energy. Reaction heat and thermochemical equations, thermochemical laws.

Literature:

BÁRTA Milan: Chemické zlúčeniny okolo nás : Anorganika., Edika, Bratislava, 2017. - 112 s. - ISBN 978-
BODONYI Ferenc: Kémiai összefoglaló: Műszaki Könyvkiadó, Budapest (4. vyd.), 1983. 537 s. - ISBN 963 10 4947 7.
SZABÓ, L.: Kémia I. – Általános kémia. Budapest : Nemzeti Tankönyvkiadó, 1995. - 255 s. - ISBN 9631864634.
ŽÚRKOVÁ, Ľ.: Všeobecná chémia. Bratislava : SPN, 1985. - 330 s. - ISBN 0010597.

GREENWOOD, N. N., EARNSHAW, A.: Az elemek kémiája I.,II.és III.kötet, Nemzeti Tankönyvkiadó, Budapest, 2004. ISBN 80-566-0068-9
KYSEĽ, Ondrej a György JUHÁSZ. Entrópia v energetike chemických reakcií. In: Pregraduální příprava a postgraduální vzdělávaní učitelů chemie. Ostrava: Ostravská Univerzita v Ostravě, 2001, S. 144-146. ISBN 80-7042-817-1.
KYSEĽ, Ondrej a György JUHÁSZ. Didaktický výklad súčasného poňatia periodickej sústavy prvkov - PSP. In: Škola a učiteľ v treťom tisícročí, Zv. 1 : Multimédiá vo vzdelávaní. Nitra: UKF v Nitre, 1999, S. 299-303. ISBN 80-967746-2-X.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 21

A	B	C	D	E	FX
4.76	9.52	19.05	28.57	9.52	28.57

Teacher: Dr. habil. PaedDr. György Juhász, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ CHM2/22	**Name:** Chemistry II.
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar **Recommended extent of course (in hours):** **Per week:** 1 / 1 **For the study period:** 13 / 13 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the seminars, student presentations on selected topics are also evaluated; at the same time, during the semester, the student continuously works on a seminar paper, which he submits at the end of the seminar. Completion of the subject is conditional on successfully passing the interim (40 points) and final written examination (60 points). Participation in the final examination is conditional on achieving at least 50% of the points (min. 20 points) from the interim examination. The final evaluation of the subject results from the evaluation and the summary written examination are as follows: Final grade=(0.2 x average % of success on the presentation of the topic + 0.3 x % evaluation of the seminar paper + 2.5 x % of success from written examinations) / 3. Total student workload: 3 credits = 75-90 hours The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: - A = 90-100% (90-100 points) - B = 80-89% (80-89 points) - C = 70-79% (70-79 points) - D = 60-69% (60-69 points) - E = 50-59% (50-59 points) - FX = 0 – 49% (0 – 49 points)	
Results of education: After completing the subject, the student: Knowledge: - becomes familiar with the basic laws and regularities of life on Earth; - understands the structure of atoms and molecules as well as connections with the properties of elements, masters the empirical laws of chemistry; - understands the process of formation of bonds between atoms, understands the importance of intermolecular interactions in biological systems; - can categorize biogenic elements and their compounds based on their physical and chemical properties and knows the biological importance of these elements;	

- can identify the basic conceptual, categorical and methodological apparatus of organic chemistry at the level necessary for biologists;
- has basic knowledge of organic chemistry, within which he controls the division of organic compounds based on their structure and content of functional groups;
- acquires knowledge of organic chemistry, with the help of which he can solve theoretical and practical problems related to living biological systems during his work;
- knows the fundamental structural principles and reactions of organic compounds;
- acquires theoretical knowledge necessary for the study and understanding of biochemistry.
Abilities:
- knows how to use the periodic table of elements to determine the properties of biogenic elements;
- with the help of the knowledge acquired during the course, the graduate can understand the more complex laws of chemistry, which are also applied in biology;
- master the basics of the nomenclature of organic compounds, based on which he can correctly determine the structure of organic compounds;
- understands the complex interrelationships between individual areas of organic chemistry and biology;
- can modify simple organic chemical reactions;
- can routinely and expertly use concepts important to living systems (e.g. nucleic acids, DNA, proteins, etc.).
Competencies:
- understand the primary chemical and physical relationships important in biological systems;
- strives for accurate and professional use of chemical and biological terms;
- can independently interpret basic natural phenomena
- after successful completion of the subject, the student acquires basic knowledge of inorganic and organic chemistry with an emphasis on the competence of using this knowledge in the practice of a future biology teacher.

Brief syllabus:

1. Introduction to inorganic chemistry, periodic table of elements, the electron configuration of atoms.
2. Overview of the most important biogenic elements and their simple compounds: hydrogen, oxygen, properties, compounds and their biological significance.
3. Overview of the most important biogenic elements and their simple compounds: carbon, nitrogen, metals and transition elements and their biological significance.
4. Basics of organic chemistry. Chemical bonding in organic compounds. Hybridization, Stereochemistry. Alkanes and cycloalkanes, nomenclature, physical and chemical properties and their reactions.
5. Alkenes, cycloalkenes, dienes and alkadienes, alkynes, nomenclature, physical and chemical properties and reactions
6. Aromatic hydrocarbons, nomenclature, physical and chemical properties and their reactions.
7. Halogen and hydroxy derivatives of hydrocarbons, nomenclature, physical and chemical properties and their reactions.
8. Aldehydes and ketones, nomenclature, physical and chemical properties, reactions and their biological significance.
9. Carboxylic acids. Functional and substituted derivatives of carboxylic acids. Nomenclature, physical and chemical properties, reactions and their biological significance
10. Written examination of knowledge,
11. Fatty acids and lipids and their biological significance.

12. Heterocycles, nomenclature, physical and chemical properties, and their importance in living organisms.
13. Nucleic acids, physical and chemical properties and their biological significance.

Literature:

BALOGH, Á.: Szerves kémia. Budapest: Műszaki Könyvkiadó, 1993. - 148 s. - ISBN 9631849791.
BRUCKNER GY.: Szerves kémia I-2. kötet : Aminosavak, peptidek, fehérjék, szénhidrátok, Tankönyvkiadó, Budapest, 1982.(6. Vyd.), 1283 s. - ISBN 963 17 6643 8.
BRUCKNER GY.: Szerves kémia III-1. kötet : Heterociklusos vegyületek. Budapest : Tankönyv Kiadó, 1991. - 755 s. - ISBN 963 18 3637 1.
GREENWOOD, N. N., EARNSHAW, A.: Az elemek kémiája I.,II.és III.kötet, Nemzeti Tankönyvkiadó, Budapest, 2004, ISBN 963 19 5255 X.
KAJTÁR M.: Változatok négy elemre - Szerves kémia 1-2. Budapest : ELTE Eötvös Kiadó, (2009). - 1000 s. - ISBN 978 963 284 114 4.
KYSEĽ, Ondrej a György JUHÁSZ. Didaktický výklad súčasného poňatia periodickej sústavy prvkov - PSP. In: Škola a učiteľ v treťom tisícročí, Zv. 1 : Multimédiá vo vzdelávaní. Nitra: UKF v Nitre, 1999, S. 299-303. ISBN 80-967746-2-X.
MACH, Pavel, Šimon BUDZÁK, György JUHÁSZ, Miroslav MEDVEĎ a Ondrej KYSEĽ. Theoretical study (CC2, DFT and PCM) of charge transfer complexes between antithyroid thioamides and TCNE: electronic CT transitions. DOI 10.1007/s0894-014-2312-7 Journal of Molecular Modeling. Vol. 20, no. 6 (2014), p. 1-16. ISSN 1610-2940. WoS. IF (2013): 1,867.
PORÁČOVÁ, J., NAGY, M.: General and Applied Biochemistry for Natural-Sciences – 1. vyd. – Budapest: Műszaki Pedagógia Tanszék, 2021. – 223 s. – ISBN 978-963-421-847-0.
PORÁČOVÁ, J., MARIYCHUK, R., NAGY. M. a kol.: Základné biochemické procesy organizmov – 1. vyd. – Prešov: Prešovská univerzita v Prešove, Fakulta humanitných a prírodných vied - 2015. – 343 s. – ISBN 978-80-555-1514-4.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 12

A	B	C	D	E	FX
16.67	16.67	16.67	0.0	25.0	25.0

Teacher: Dr. habil. PaedDr. György Juhász, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ DIE/22	**Name:** Dietetics

Types, range and methods of educational activities:
Form of study: Lecture / Seminar
Recommended extent of course (in hours):
Per week: 1 / 1 **For the study period:** 13 / 13
Methods of study: present

Number of credits: 1

Recommended semester/trimester of study: 6.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The condition for passing the subject is active participation in the lessons, which consists of a theoretical part. To pass the subject, the student must write a test (50%) from the theoretical part. The student prepares a seminar paper (50 points), which he also presents. The seminar work will follow the theoretical part of the subject both thematically and in terms of content. The seminar paper must meet the content and formal requirements of scientific writing. Point distribution of the seminar work: interpretation of the situation//problem (10%), presentation of the literature review (10%), analysis and evaluation (10%), drawing conclusions and formulating proposals (10%), elaboration (10%).
Total student load: 1 credit = 25-30 hours
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student knows the development of the concept of health and can interpret levels of prevention in the context of healthy nutrition.
- The student knows the dietary causes of civilisation diseases.
- The student knows inorganic and organic nutrients that make up the organism, their use, and optimal and pathological processes of digestion and absorption.
- The student knows the types of malnutrition and is aware of the issue of individual responsibility.
- The student knows the criteria for a healthy diet and domestic and international sustainable dietary recommendations.
- The student knows the types of diet food and the role of a dietitian and nutritionist.

- The student knows how to navigate global and local problems related to the challenges of sustainable agriculture.
Abilities:
- The student can independently obtain information on the topic of dietetics.
- The student can calculate nutrients and analyse menus.
- The student can think critically based on his knowledge of anatomy and physiology.
- Based on his botanical and zoological knowledge and primary ecological education, the student can interpret the consequences of destructive human activities on the food safety of humankind and the food supply of future generations.
Competencies:
- The student is committed to a healthy and ecological diet.
- The student consciously and credibly represents evidence-based principles of healthy eating

Brief syllabus:

1. Levels of prevention. Health as an individual and social value. Epigenetic knowledge.
2. Nutrition-related diseases of civilisation, analysis of public health data. The importance of primary prevention and health-conscious behaviour in personalised nutrition.
3. Inorganic nutrients (water, vitamins, minerals).
4. Organic nutrients (proteins, fats, carbohydrates). Functional foods.
5. The process of digestion and absorption (anatomical-physiological knowledge), the importance of the microbiome, probiotics, and prebiotics.
6. Body composition. BMI. Types of malnutrition: obesity, malnutrition. Disturbances in the perception of body proportions.
7. Metabolic diseases, autoimmune diseases. Types of diabetes.
8. Absorption disorders, allergies, food intolerances.
9. Healthy eating. Dietary recommendations, types of diets - domestic and international overview.
10. Types of diets, fashionable diets.
11. Duties of a dietitian and nutritionist. Analysis of the menu, calculation of nutritional values.
12. Food security from farm to table. The importance of traditional ecological knowledge. The importance of water and carbon footprint and biodiversity in the food industry.
13. Sustainability in animal husbandry and plant production. Precision agriculture. Criteria for ecological/biological agriculture. Biodynamic agriculture. Foods of the future, research directions.

Literature:

FIEGLER, M.: Klinikai és gyakorlati dietetika. Medicina Könyvkiadó Zrt, Budapest, 2015. 668s. ISBN 978 963 226 562 9 https://www.etk.pte.hu/public/upload/files/Palyazati_iroda/elnyert/Klinikai_es_gyakorlati_dietetika.pdf
HOPFENZITZOVÁ, P.: Minerálne látky : Aby sme boli fit. 1. vyd. : Media klub, 1999. 88 s. ISBN 80-88963-22-2
MANZ F., VAN´T HOF M., HASCHKE F., DARVAY S. Iodine supply in children from different European areas: The Euro-Growth study. Journal of Pediatric Gastroenterology and Nutrition. Vol. 31, no. 1 (2000), p. 72-75.
NAGY, M.: Humánbiológia. – 1. vyd. – Komárno – Dunajská Streda: Selye János Egyetem – Lilium Aurum, 2006. – 250 s. – ISBN 8080622833.
ROIZEN, M. F.: You on a Diet: The Owner's Manual for Waist Management- 1. vyd. - New York : Simon & Schuster, Inc., 2006. - 370 s. - ISBN 9780743292542.
ŠIMONEK, J.: Pohyb a zdravie. 1. vyd. - Bratislava : PEEM, 2010. 155s. ISBN 978-80-8113-034-2
TARSOLY, E.: Funkcionális anatómia - 3. prepr. vyd. - Budapest : Medicina Könyvkiadó, 2010. - 261 s. - ISBN 978 963 226 248 2.

WARD, E. M.: A diétázás bibliája. 1. vyd. Pécs : Alexandra Kiadó, 2005.320 s. ISBN 963 369 475 2.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 2

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

Teacher: Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ EMB/22	**Name:** Embryology and education for parenthood

Types, range and methods of educational activities:
Form of study: Seminar
Recommended extent of course (in hours):
Per week: 2 **For the study period:** 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 2.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The condition for passing the subject is active participation in seminars and the preparation of a seminar paper, for which the student can receive 30% of the total assessment (assessment for the expertise of resources, graphic documentation and the overall content of the seminar paper at most) and from the seminar paper the preparation of a presentation, which the student will deliver at seminars. During the semester, there will be two written tests on which the student can achieve 35% of the total evaluation for each test.
Total student workload: 3 credits = 75-90 hours
26 hours of participation in contact classes; 25 hours of preparation of seminar work and presentation; 24-39 hours of self-study and preparation for written tests;
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student can characterize the genitals, gametes and their formation and the associated ovarian and uterine cycle of a woman.
- The student can characterize the ontogenetic developmental stages of a person from prenatal development together with the function of the placenta to postnatal development (newborn age).
- The student can characterize the origin and development of individual organs and organ systems during the prenatal development of the fetus.
- The student knows the factors affecting the fetus with the characteristics of the most common developmental and congenital disabilities in the fetus.
- The student knows the basics of sex education, which he can use to teach family planning in primary and secondary schools.

Abilities:
- The student can explain the basic mechanisms of human reproduction and physiological events occurring during pregnancy and after childbirth.
- The student can characterize the importance of sexual education in teaching biology and will transfer his knowledge to the methodology of teaching biology.
- The student can understand the importance of a healthy lifestyle during pregnancy and in preparation for parenthood.
- The student can use the acquired knowledge in his own life and pedagogical practice.
Competencies:
- The student has a positive approach to education about responsible family planning.
- The student has a positive attitude towards sex education; from the knowledge imparted, the children know sexually transmitted diseases, their mode of transmission, and their prevention and contraceptive methods.
- The student knows how to incorporate the importance of prevention into education and thus prevent termination of pregnancy.
- With the acquired knowledge, the student contributes to the creation of a responsible generation, which will have relevant information and knowledge about the reproductive systems, prenatal development, a healthy lifestyle during pregnancy, sexually transmitted diseases, as well as about contraceptive methods, sexual abuse and termination of pregnancy.

Brief syllabus:
1. Human embryology, topographic terms in embryology, and basic developmental processes. Genital organs and sex cells.
2. Gametogenesis - spermiogenesis, oogenesis. Reproductive cycle of a woman - ovarian and uterine cycle.
3. Overview of human ontogenetic development. Egg fertilization, blastogenesis. Implantation of blastocyst, trophoblast, embryoblast.
4. Germ leaves and extraembryonal parts. Primitive organs of the embryo, formation of the body of the embryo.
5. Placenta - the structure and function of the placenta, abnormalities in the shape and placement of the placenta. The umbilical cord, fruit packaging. Development of the external shape of the embryo and fetus, determination of the age of the embryo and fetus.
6. Writing the test. Head and neck region, gill arches and gill slits.
7. External genitalia. Development of internal organs - nervous system.
8. Development of the cardiovascular system and placental blood circulation. Development of the digestive system, respiratory system, urinary and genital organs and locomotor system.
9. Hormonal influences in pregnancy. Factors of the external environment - physical, chemical, biological.
10. Developmental disorders and congenital disabilities. Postnatal development of the individual, characteristics of the newborn.
11. Division of age periods in a person's life. Gender, gender and gender stereotypes.
12. Sexual and reproductive health and rights. Sexual education in primary and secondary schools. Planned Parenthood. Contraceptive methods.
13. Summarizing the curriculum and writing the test.

Literature:
HORTOBÁGYINÉ, N. Á.: Családi életre nevelés az oktatásban: Család-órákat segítő kézikönyv. – 1. vyd. – Budapest: Sapientia Szerzetesi Hittudományi Főiskola Családpeadagógiai Intézete, 2005. – 443 s. – ISBN 963 218 400 9.

KAPELLER, K.: Embryologický Atlas/Atlas of embryology. - 1. vyd. - Bratislava : Vydavateľstvo OSVETA, 1996. - 120 s. - ISBN 80-217-0549-3.
SADLER, T.W.: Orvosi embriológia, 12. vyd. -. Budapest. Medicina Könyvkiadó Zrt., 2014, - 426 s. - ISBN: 978 963 226 501 8.
SZILÁGYI, V.: Szexuálpedagógia. Szexuális egészségnevelés. - 1. vyd. - Budapest : Athenaeum 2000 Kiadó, 2006. - 223 s. - ISBN 963 9615 51 X
KISS, F., SZENTÁGOTHAI, J.: Az ember anatómiájának atlasza – 1., - 85. vyd. – Budapest: Medicina Könyvkiadó Zrt., 2012. – 415 s. – ISBN 978 963 226 347 2.
LÁZÁR, I., PIKÓ, B.: Orvosi antropológia. – 1. vyd. – Budapest: Medicina könyvkiadó, 2012. – 582 s. – ISBN 978 963 226 406 6.
NAGY, M.: Humánbiológia. – 1. vyd. – Komárno – Dunajská Streda: Selye János Egyetem – Lilium Aurum, 2006. – 250 s. – ISBN 8080622833.
WULF, Ch.: Az antropológia rövid összefoglalása. – 1. vyd. – Budapest: Enciklopédia Kiadó, 2007. – 323 s., - ISBN 963 9655 09 0.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: RNDr. Eva Tóthová Tarová, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ EPI/22	**Name:** Basics of epidemiology

Types, range and methods of educational activities:
Form of study: Seminar
Recommended extent of course (in hours):
Per week: 1 **For the study period:** 13
Methods of study: present

Number of credits: 1

Recommended semester/trimester of study:

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Total student load: 1 credit = 25-30 hours
Students participate in 13 hours of teaching. Through self-study, in the range of 15 hours, they prepare for the final test for 50 points.
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student knows the task's subject and epidemiology's history.
- The student knows the epidemiology of non-infectious (civilised) diseases,
- Knows the role of epigenetic factors in the development of diseases.
- The student knows the systematic classification of pathogens.
- The student knows the most important infectious diseases.
- The student has basic epidemiology knowledge and knows prevention tips.
- The student knows the role of the school in the prevention process.

Skills:
- The student can analyse epidemiological indicators of domestic and international epidemiological statistics.
- The student can apply his knowledge of health science in practice.
- The student can organise and implement the activities necessary to manage epidemics, taking into account the peculiarities of the age categories of the youth.

Competencies:
- The student positively approaches the tasks of epidemiological prevention and the tasks during the epidemic at schools.

- The student is a role model in preventing diseases by personal example.

Brief syllabus:

1. The subject of epidemiology, its role, and history.
2. Development of the epidemiological situation in Slovakia compared to international, mainly European, development.
3. Epidemiology of the most important non-infectious diseases. The role of epigenetic factors in the development of diseases.
4. Epidemiology of the most important infectious diseases. System of pathogens. Bacteriology, virology, mycology, parasitology.
5. The concept of infection and influencing factors. Infectious disease, epidemic. Basics of statistics.
6. Basic concepts of immunology, the concept of immunity, and its types.
7. Classification of infectious diseases based on their entry into the human body 1. Respiratory infections, diseases of the digestive tract, infections from food, infectious diseases of the bloodstream and lymphatic system.
8. Classification of infectious diseases based on their entry into the human body2. Infectious diseases penetrate through the immune system, and diseases spread through sexual contact.
9. Classification of infectious diseases based on their entry into the human body3. Zoonoses.
10. Basic epidemiological knowledge, subject of epidemiology, its importance.
11. Driving forces of the epidemic. Necessary activities in the event of epidemics.
12. Possibilities of prevention. The role of schools in prevention.
13. Final test.

Literature:

BETINA, V.: Mikrobiológia 1.,2. Bratislava : Slovenská Technická Univerzita, 1993, 472 p. ISBN 8022705764.
HORÁKOVÁ, K..: Mikrobiológia 2. Bratislava : Slovenská Technická Univerzita, 1993, 214 s. ISBN 802270525
KEVEI F., KUCSERA J.: Mikrobiológia I. 1. vyd. – Szeged: JATEPress, 2002, 301 s.
KEVEI F., KUCSERA J.: Mikrobiológia II. 1. vyd. – Szeged: JATEPress, 1999, 226 s.
KOPP M.: Epigenetika, epidemiológia és magatartásorvoslás. Magyar Tudomány, 2012, 923-930. http://www.matud.iif.hu/2012/08/06.htm
MAKOVICKÝ, P.: Mikrobiológia. 1. vyd. – Komárno: Univerzita J. Selyeho, 2018, 115 s., ISBN 978 80 8122 235 1.
NAGY, M.: Humánbiológia. – 1. vyd. – Komárno – Dunajská Streda: Selye János Egyetem – Lilium Aurum, 2006. – 250 s. – ISBN 8080622833.

Language, knowledge of which is necessary to complete a course:

Hungarian or Slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 0

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

Teacher: Ing. Pavol Balázs, PhD., Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD., Dr. habil. PaedDr. Melinda Nagy, PhD., RNDr. Eva Tóthová Tarová, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ FYP/22	**Name:** Phytopathology
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The condition for passing the subject is passing the final knowledge test for 100 points and writing a seminar paper. Total student workload: 3 credits = 75-90 hours The student will participate in 26 hours of teaching. He works for 20 hours on the seminar paper preparation and prepares for the test by self-study in the range of 30-45. The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: - A = 90-100% (90-100 points) - B = 80-89% (80-89 points) - C = 70-79% (70-79 points) - D = 60-69% (60-69 points) - E = 50-59% (50-59 points) - FX = 0 – 49% (0 – 49 points)	
Results of education: Knowledge: - The student will learn about plant infectious diseases' causative agents, such as phytopathogenic viruses, viroids, mycoplasmas, bacteria and fungi. - The student will learn the life cycles of pathogenic organisms, especially fungi, as the basis for the successful cultivation of economic plants. - The student knows the negative side of protecting agricultural plants with chemicals. Abilities: - The student can identify some widespread diseases of cultivated plants. - The student can see plant pathogens in ecological contexts. Competencies: - The student has a positive attitude toward the diversity of life in the cultural landscape and can consider the consequences of chemical intervention in order to preserve yields from economic plants in the environment.	

- The student leads his environment to a diversified attitude towards economic, rare and invasive species.

Brief syllabus:

1., Introduction to the scientific discipline - phytopathology. Symptoms of diseases on plants
2., Physiological diseases. Characteristics of non-cellular pathogenic microorganisms
3., Characteristics of prokaryotic pathogenic microorganisms
4., Characteristics of eukaryotic pathogenic microorganisms 1. (fungi below)
5., Characteristics of eukaryotic pathogenic microorganisms 2. (fungi above)
6. Harmfulness of pathogenic microorganisms. Pathogenesis, Methods of protection against plant pathogens.
7., Economically significant cereal diseases.
8., Economically essential diseases of fruit species (seeds, drupes)
9., Economically significant diseases of fruit species (other fruits and vines)
10., Economically essential diseases of vegetables (fruit vegetables, root vegetables)
11., Economically essential diseases of vegetables (other vegetables)
12., Economically essential diseases of ornamental plants
13., The impact of chemical agents used for plant protection on the environment

Literature:

GÁBORJÁNYI, R.: Molekuláris növénykórtan. - Budapest : Agroinform Kiadó, 2007. - 338 s. - ISBN 9789635028719.
HORVÁTH, J.: Növényvirusok. Budapest : Mezőgazda Kiadó, 1999. 430 s. ISBN 963 9239 372.
TÚRI I.: Zöldséghajtatás : Gazdakönyvtár. - 1. vyd. - Budapest : Mezőgazda Kiadó, 1993. - 419 s. - ISBN 963 8160 56 X.
ŽEMLA, J. Všeobecná virológia - 1. vyd. - Bratislava : SAP, 1995. - 238 s. - ISBN 80-85665-47-6.

Language, knowledge of which is necessary to complete a course:

Hungarian or Slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 0

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

Teacher: Ing. Pavol Balázs, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ FYR/22	**Name:** Plant physiology

Types, range and methods of educational activities:
Form of study: Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 2 **For the study period:** 13 / 26
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
There will be two written examinations during the semester. At the end of the semester, the student submits a laboratory protocol from the laboratory exercises. Completion of the subject is conditional upon completing two mid-term examinations and a final oral and written exam. Participation in the exam is conditional on handing over the protocol from the laboratory exercises before the exam and passing written examinations during the semester.
Total student workload: 4 credits = 100-120 hours
The student will participate in theoretical teaching and laboratory exercises for 39 hours. Twenty hours of work on preparing the protocol from laboratory exercises and 40-60 hours of self-study. The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student knows the professional terminology of the scientific field
- The student knows the basic physiological processes of plants.
- The student knows the importance of photosynthesis for life on Earth.
- The student knows the importance of mineral nutrition for plants.

Abilities:
- The student can approach the issue of plant physiology to his students through simple laboratory experiments.
- The student will understand the life cycle of plants and their regulatory mechanisms.

Competencies:
- Based on acquired theoretical knowledge and practical experience, the student can explain the importance of physiological research for human society.

- The student leads his surroundings to a better understanding of biological processes.

Brief syllabus:

Physiology of plants - Seminar
1., Introduction to plant physiology
2., The influence of the environment on the physiological processes of plants
3., Plant nutrition (mineral, heterotrophic)
4., Photosynthesis
5., Breathing
6., Nitrogen metabolism in the plant body
7., Transport of water in plants
8. Transport of substances in the plant body
9., Growth and development
10., Important growth regulators - phytohormones
11., Ontogeny of higher plants
12., Vegetative and generative phases of plant development
13., Movements of plants
Physiology of plants - Practical lessons
Separate laboratory exercises are part of the subject. In the introductory lesson, the student gets to know the laboratory regulations. He is gradually familiar with the instructions for performing experiments. He will document the conducted experiments in plant physiology protocols. In the last week of the semester, the student will submit all the protocols, and he will be tested on the theory of one of the experiments. During the practical lessons in the 6th and 12th weeks, they write a review of the theoretical part of the study.

Literature:

HARASZTY Á., (1990): Növényszervezettan és növényélettan. Tankönyvkiadó, Budapest ISBN 963 18 3006 3
HEJNÁK V., a kol. (2010) : Fyziologie rostlin. Vydala Česká zemedelská univerzita v Praze ISBN 978-80-213-1667-6
SUBA J., (1991): Növényélettani gyakorlatok. Tankönyvkiadó, Budapest

Language, knowledge of which is necessary to complete a course:

Hungarian or Slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 0

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

Teacher: Ing. Pavol Balázs, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ FYZ/22	**Name:** Animal and human physiology
Types, range and methods of educational activities: **Form of study:** Lecture / Practical **Recommended extent of course (in hours):** **Per week:** 2 / 1 **For the study period:** 26 / 13 **Methods of study:** present	
Number of credits: 5	
Recommended semester/trimester of study: 5.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: General conditions for passing the subject: active student participation in the lessons, which consist of a theoretical and practical part. - student participation in assigned practical and theoretical tasks (30%) - involvement in analysis and discussions during lectures (5%) - proposal of an educational activity project (5%) - oral exam (60%) Protocol evaluation criteria: - content page of protocols (50%) - formal protocol page (10%) - manual skills (40%) Total student load: 5 credits = 125-150 hours - 39 hours of participation in contact classes; 11 hours of preparation of protocols; 20 hours of preparation of the educational activity project and tasks assigned in the lessons; 55-70 hours of self-study; The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: - A = 90-100% (90-100 points) - B = 80-89% (80-89 points) - C = 70-79% (70-79 points) - D = 60-69% (60-69 points) - E = 50-59% (50-59 points) - FX = 0 – 49% (0 – 49 points)	
Results of education: Knowledge: - The student can characterise the basic concepts of physiology, explain the basic principles of physiology - The student can characterise the physiology of individual human and animal organ systems, emphasising these systems' functional characteristics and differences in specific systematic units.	

- The student can summarise theoretical knowledge about the primary pathological conditions of these organ systems.
Abilities:
- The student can understand and understand the physiological events in the bodies of animals and humans.
- The student can explain and use his knowledge of physiology in his pedagogical practice.
- The student can practically perform basic laboratory exercises
- The student can explain the importance of health protection
Competencies:
- The student will gain an overview of the functioning of the body of animals and humans, as well as the diseases that can most often affect health, thus gaining a positive attitude towards protecting and maintaining their health.

Brief syllabus:

Literature:
ČALKOVSKÁ, A.: Fyziológia človeka : pre nelekárske študijné programy. - 1. vyd. - Martin : Osveta, 2010. - 220 s. - ISBN 978-80-8063-344-8
HILL, R.W. et al.: Animal Physiology. 3rd ed., 2012, ISBN 978-0-87893-559-8
KISS, J.: Élettan : Feladatok és megoldásaik. Budapest : Typotex, 2004. - 660s. - ISBN 963 9548 07 3.
MADER, S. S.: Human biology. - 11. vyd. - Boston: Wm. C. Brown Publishers, USA, – 2008. - 600 s. - ISBN 0-978-0-07-016778-0.
MYSLIVEČEK, J., TROJAN, S.: Fyziológie do kapsy. Praha : Triton, 2004. - 466s. - ISBN 80-7254-497-7
NAGY, M.: Humánbiológia. – 1. vyd. – Komárno – Dunajská Streda: Selye János Egyetem – Lilium Aurum, 2006. – 250 s. – ISBN 8080622833.
PORÁČOVÁ, J., NAGY, M., BERNÁTOVÁ, R., a kol. Fyziológia živočíchov a človeka - 1. vyd. - Prešov : Fakulta humanitných a prírodných vied PU v Prešove, 2014. - 591 s., [36,65 AH]. - ISBN 978-80-555-1150-4.
PORÁČOVÁ, J., NAGY, M., MYDLÁROVÁ-BLAŠČÁKOVÁ, M., a kol. Cvičenia z fyziológie živočíchov a človeka. - 1. vyd. - Prešov : FHPV PU v Prešove, 2014. - 313 s. - ISBN 978-80-555-1149-8.
PORÁČOVÁ, J., NAGY, M., MYDLÁROVÁ-BLAŠČÁKOVÁ, M., a kol. Ekofyziológia živočíchov a človeka - 1. vyd. - Prešov : Prešovská univerzita v Prešove, Fakulta humanitných a prírodných vied, 2015. - 583 s. - ISBN 978-80-555-1524-3.
REECE, W.R.: Fyziologie a funkční anatomie domácích zvířat. 2., rozšířené vydání, Vydavateľstvo: Grada, 2010, 473 strán, ISBN: 9788024732824 Oldal: 29
SZENTÁGOTHAI, J.: Funkcionális anatómia I.-III. Budapest : Medicina Könyvkiadó, 2006. - 710, 600, 800. - ISBN 963 242 565 0.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Lectures:
1. Introduction to physiology, basic physiological terms
2. Cell physiology, cell membrane.
3. Physiology of the circulatory system
4. Physiology of sensory organs: vision, skin receptors
5. Physiology of sensory organs: smell, taste, hearing, perception of body balance

6. Physiology of the nervous system
7. Physiology of the endocrine system
8. Physiology of the gastrointestinal system
9. Physiology of the respiratory system
10. Physiology of the excretory system
11. Physiology of the reproductive systems
12. Physiology of the muscular system
13. Physiology of bones and joints

Practical lesson:
1. Rules of work in the laboratory, work safety
2. Cell physiology exercise
3. Exercise on the physiology of the circulatory system I.
4. Exercise in the physiology of the circulatory system II.
5. Exercise on the physiology of sensory organs: sight
6. Exercise on the physiology of sensory organs: skin receptors
7. Exercise on the physiology of sensory organs: hearing
8. Exercise on the physiology of the nervous system I.
9. Exercise in the physiology of the nervous system II.
10. Physiology exercise of the gastrointestinal system and the respiratory system
11. Exercises on the physiology of the endocrine system, the excretory system, the reproductive system and the musculoskeletal system
12. Proposal for an educational activity project
13. Control of laboratory protocols from physiology

Evaluation of subjects

Total number of evaluated students: 0

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

Teacher: Dr. habil. PaedDr. Melinda Nagy, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ HIC/22	**Name:** Histology and cytology
Types, range and methods of educational activities: **Form of study:** Lecture / Practical **Recommended extent of course (in hours):** **Per week:** 1 / 1 **For the study period:** 13 / 13 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The condition for passing the subject is active participation in the lessons, which consist of a theoretical and practical part. The student will learn to work with a microscope during the practical part. He documents his work with a protocol. At the end of the semester, he passes a test and an oral exam. Submitting the protocols and passing the test are conditions for passing the subject. Final grade of the subject: A – 100-90%, B – 89-80%, C – 79-70%, D – 69-60%, E – 59-50%. Achieving 50% of the total points is necessary to award credits. Intermediate assessment of protocols from practical exercises - 50%, and final test - 50%. Total student workload: 3 credits = 75-90 hours The student will attend classes in the range of 26 hours. He works for 20 hours on the protocols and prepares for the test by self-study for 30-45 hours. The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: - A = 90-100% (90-100 points) - B = 80-89% (80-89 points) - C = 70-79% (70-79 points) - D = 60-69% (60-69 points) - E = 50-59% (50-59 points) - FX = 0 – 49% (0 – 49 points)	
Results of education: Knowledge: - The student knows the professional terminology of the scientific field. - Can identify the basic conceptual, categorical and methodological apparatus of the subject. - He has expanded his knowledge in related sciences and understands and categorizes connections from other scientific disciplines. - By completing the subject, students will learn about the prokaryotic and eukaryotic cells as the basic structural and functional units of living organisms. - The student knows the essential characteristics of plant tissues and animal tissues. - The student knows the structure of the microscope as a work tool in biological work.	

Abilities:
- The student can work with a microscope.
- The student can prepare a simple specimen for further examination under the microscope.
Competencies:
- The student has a positive attitude toward working with a microscope to solve biological problems.
- The student can work independently with the school microscope.

Brief syllabus:

Lecture:
1., Brief history of cytology and histology.
2., Organization of the pro- and eukaryotic cells.
3., Characteristics. Cells of plants, animals and fungi.
4., Chemical composition of the cell - inorganic compounds
5., Chemical composition of the cell-organic compounds
6., Structure and function of cells - biological membranes, nucleus and nucleolus, lysosomes, microtubules, endoplasmic reticulum.
7., Structure and function of cells - mitochondria, plastids, microbodies, Golgi apparatus.
8., Cell reproduction - mitosis, meiosis and cytokinesis.
10., Classification of plant tissues: Meristematic tissues, mechanical tissues, covering tissues, absorbent tissues, ventilation tissues, excretory tissues, storage tissues, and conductive tissues.
11., Classification of tissues I.: epithelial, connective.
12., Classification of tissues II.: muscular, nervous.
13., Aging and cell death.
Exercise:
1. Introduction. Work safety in biological laboratories.
2., Types of microscopes.
3., Construction of school microscopes.
4., Other laboratory techniques and their use.
5., Using a microscope - observation of permanent preparations.
6., Using a microscope - manual preparation and observation of preparations from different materials.
7., Observation of a plant cell and its nucleus.
8., Observation of plant tissues and plastics.
9., Observation of an animal cell.
10., Observation of human epithelium, hair, nails, etc.
11., Observation of tissues.
12., Observation of unicellular organisms.
13., Observation of osmosis on cucumber cells.

Literature:

BÓZNER, A: Cytológia. Osveta, 1992. - 266. - ISBN 8021701684.
HUDÁKOVÁ, A.: Histológia živočíchov. Bratislava : Univerzita Komenského v Bratislave, 1994. - 100. - ISBN 8022307297.
KONRÁDOVÁ, V., VAJNER, L., UHLÍK, J.: Histologie přednášky pro bakalařské studium. - 1. vyd. - Praha : HH, 2005. - 186 s. - ISBN 80 7319 009 5.
NAGY, M.: Humánbiológia, Lilium Aurum, Dunaszerdahely, 2006, ISBN 8080622833.
PAPP, M.: A növények szövetei és a szervek szövettana. - Debrecen : Kossuth Egyetemi Kiadó, 2003. - 210. - ISBN 0013794.

Language, knowledge of which is necessary to complete a course:

Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 24

A	B	C	D	E	FX
12.5	12.5	37.5	4.17	8.33	25.0

Teacher: Ing. Pavol Balázs, PhD., PaedDr. Daniel Dancsa, Dr. habil. PaedDr. Melinda Nagy, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ OB/22	**Name:** Bachelor's Thesis and Defense
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 8	
Recommended semester/trimester of study:	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: While writing the Bachelor thesis, the student follows the instructions of the supervisor and the Rector's guidelines on the preparation, registration, access and archiving of Bachelor and Master's theses, dissertations and habilitation theses written at Selye János University. The recommended length of the Bachelor thesis is 30 to 40 pages (54 000 to 72 000 characters with spaces). The deadline for submission of the Bachelor thesis is specified in the timetable for the academic year. The Bachelor thesis is checked for authenticity in the central register of final theses. A report is drawn up on the outcome. The examination of authenticity is a prerequisite for the defence. The submission of the Bachelor thesis includes a licence agreement between the student and the Slovak Republic, represented by the University, on the use of digital copies of the Bachelor thesis. The Bachelor thesis is evaluated by the supervisor and the assessor who prepare their evaluation on the basis of the criteria provided. The supervisor mainly assesses the fulfilment of the objective, the student's autonomy and initiative in the development of the topic, the cooperation with the supervisor, the logical structure of the Bachelor thesis, the chosen methods and methodology, the professional quality of the thesis, the depth and quality of the development of the topic, the usefulness of the thesis, the applicability of its results, the work with literature, the relevance of the sources used, as well as the formal features, spelling, style and originality of the thesis. The assessor focuses on the relevance and appropriateness of the topic of the thesis, the aim of the thesis and its fulfilment, the logical structure of the Bachelor thesis, the sequencing and division of chapters, the appropriateness of the methods and methodology used, and the professional quality of the thesis, the depth and quality of the treatment of the topic, the usefulness of the thesis, the applicability of its results, the work with the literature, the relevance of the sources used, and the formal features, spelling, style and originality of the thesis. The examination board will assess the originality of the thesis, the degree of student involvement in the solution of the academic problem, the student's self-reliance and ability to solve the scientific problem - including the search for literature, the formulation of objectives, the choice of method, the selection of research material, the ability to evaluate, the ability to discuss the results, the summary and presentation of the results, and the relevance to the educational process, etc.	

The committee will also assess the ability to present the results, including answers to questions on the topic, adherence to time constraints, etc.
The State Examination Board will evaluate the examination in an informal meeting and decide the mark. The grading is a complex assessment of the quality of the Bachelor thesis and its defence, taking into account the reviews and the process of thesis defence. The committee will mark the defence with an aggregate mark. The mark may be the same as, or better or worse than, the mark given in the marks, depending on the thesis defence.
The grading scale is A - 100-91%, B - 90-81%, C - 80-71%, D - 70-61%, E - 60-50%. A student who does not achieve 50% will not receive credit.
The results of the oral and theoretical part of the examination will be announced publicly by the chairperson of the board in public.

Results of education:
Knowledge:
- The student is familiar with the structure of an academic publication,
- The student can use the resources in an independent and creative way,
- The student is able to analyse and evaluate the problem under study in his/her field of research,
- The student is able to select research methods and procedures appropriately and to apply them effectively.

Skills:
- The Bachelor thesis demonstrates the student's knowledge of the theoretical and practical aspects of the problem under study,
- The student should demonstrate the ability to work with national and international literature, to select relevant information and to use his/her ability to collect, interpret and process literature,
- The student is able to learn independently, enabling him (her) to continue his (her) studies,
- The student is able to collect and interpret relevant data (facts) in the field of his (her) study and to make decisions that take into account social, scientific and ethical aspects,
- The student is able to support the ideas presented with arguments and to draw practical conclusions and formulate proposals,
- The student is able to present the results of the Bachelor thesis,
- The student is able to respect the principles of academic integrity and ethics.

Competences:
The student is able to
- express his/her own linguistic and professional culture and approach to the professional issues encountered in the course of his/her studies, in an appropriate way
- reason and apply knowledge methodologically, both theoretically and practically,
- put knowledge into practice and to organise it,
- answer the questions of the supervisor and the assessor to the required standard and thus be able to defend their Bachelor thesis successfully.

Brief syllabus:
The procedure for defending the Bachelor Thesis is as follows:
1. The student presents his/her thesis.
2. The main points of the thesis supervisor' and opponent's reviews are presented.
3. The student answers the questions of the supervisor and the opponent.
4. Professional discussion of the Bachelor Thesis, when the student answers questions.

The presentation of the Bachelor thesis should mainly include the following points:
1. A brief justification of the choice of topic, its relevance and practical utility.
2. Explanation of the objectives of the thesis and the methods used.
3. The main content of the thesis.

4. The conclusions and proposals drawn by the student.
A copy of the thesis and its electronic presentation are provided to the student during the presentation. The student presents the thesis on his own for a minimum of 10 minutes. He/she may use computing devices.
The final thesis is available to the committee before and during thesis defence.

Literature:
KATUŠČÁK, D. Ako písať vysokoškolské a kvalifikačné práce. Bratislava: Enigma, 2004.
Aktuálna Smernica rektora o úprave, registrácii, sprístupnení a archivácii záverečných prác na Univerzite J. Selyeho – dostupné na https://www.ujs.sk/documents/Smernica_c.2-2021o_zaverecnych_pracach_.pdf

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher:

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ OKB/22	**Name:** Slovak professional conversation

Types, range and methods of educational activities:
Form of study: Seminar
Recommended extent of course (in hours):
Per week: 2 **For the study period:** 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The condition for passing the subject is active participation in the lessons, which consist of a theoretical and practical part. As part of the practical part, the student will have to develop an independent project in the Slovak language based on the knowledge acquired during the subject. The project will consist of technical terms and topics of a biological nature. The student submits the project for review at the end of the semester and presents it (30%). During the exam period, students take a final exam on theoretical knowledge (70%).
Total student workload: 3 credits = 75-90 hours
26 hours of participation in contact classes; 20 hours of preparation of the educational activity project and tasks assigned in the lessons; 35-45 hours of self-study;
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
The student acquires new knowledge, expands the vocabulary of professional terms, and is capable of continuous communication at the professional level.
Knowledge:
- The student becomes familiar with new words, professional expressions and stylization in the Slovak language.
- The student expands his vocabulary and can express his thoughts professionally.
- The student knows how to work more efficiently with Slovak texts.
Abilities:
- The student can understand Slovak professional texts at a higher level.
- The student can develop a project in the Slovak language.

- The student can use the knowledge acquired from Slovak conversation and apply it in preparing the final theses.
Competencies:
- The student will develop a more positive relationship with the Slovak language and gain more self-confidence in his abilities.
- With a better understanding of Slovak texts, the student gains a more positive attitude and removes the fear of unknown concepts.
- The student is active in pedagogical areas of education within his competencies and takes responsibility for forming prejudices against the Slovak language and its practical use in practice.

Brief syllabus:
1. Basic technical terms from biology
2. Professional conversation focusing on cell biology
3. Professional conversation focusing on zoology 1
4. Professional conversation focusing on zoology 2
5. Professional conversation focusing on ethology
6. Professional conversation focusing on botany 1
7. Professional conversation focusing on botany 2
8. Professional conversation focusing on genetics
9. Professional conversation focusing on the basics of agriculture
10. Professional conversation with a focus on laboratory work
11. Expert conversation focusing on ecology
12. Professional conversation focusing on the environment
13. Submission and presentation of the project

Literature:
GLOVŇA J., DUDOVÁ K.: Konverzačná príručka zo slovenského jazyka. - 1. vyd. - Nitra : Univerzita Konštantína Filozofa, 2015. - 174 s. - ISBN 978-80-558-0850-5.
KISS T., GAJDA T., GYURCSIK B.: Bevezetés a bioszervetlen kémiába. - 1. vyd. - Budapest : Nemzeti Tankönyvkiadó, 2007. - 300 s. - ISBN 978-963-19-5999-4.
NAGY, M.: Humánbiológia. Komárno : Selye János Egyetem, 2006. 250 s. ISBN 8080622833.
NOVÁK, J. – SKALICKÝ, M.: Botanika : Cytologie, histologie, organologie, systematika. 2. vyd. - Praha : Powerprint, 2009.352 s. ISBN 978-80-904011-5-0.
O. REECE W.: Fyziologie a funkční anatomie domácích zvířat . - 2.rozšířené vyd. - Praha : Grada Publishing, a.s., 2011. - 473 s. - ISBN 978-80-247-3282-4.
TÓTH, Z.: Bevezetés a Kémiába : Fizikai-kémiai laboratóriumi gyakorlatok biológiaszakos halgatók számara. 1. vyd. - Debrecen : Kossuth Egyetemi Kiadó, 2002. 89 s.
WOLF, J.: ABC človeka. 1. vyd. - Praha : Orbis, 1977. 462s.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Ing. Iveta Szencziová, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ PEP/22	**Name:** Cultivation of plants

Types, range and methods of educational activities:
Form of study: Practical
Recommended extent of course (in hours):
Per week: 2 **For the study period:** 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 4.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The condition for passing the subject is active participation in the lessons, which consist of a theoretical and practical part. As part of the practical part, the student will have to prepare a seminar paper based on the knowledge he acquired while teaching the subject. The seminar work will consist of technical terms and topics of an agricultural nature. The seminar paper must meet the content and formal requirements of scientific writing. At the end of the semester, the student submits the seminar work for review and presents it as a presentation (20%). During the exam period, the student writes a test on theoretical knowledge (80%).
Total student workload: 3 credits = 75-90 hours
26 hours of participation in contact classes; 20 hours of preparation of the educational activity project and tasks assigned in the lessons; 35-45 hours of self-study;
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
The student acquires new knowledge about agriculture, expands his knowledge of technical terms and can understand and carry out basic cultivation practices.
Knowledge:
• The student can apply the acquired knowledge in the teaching-learning process of biology.
• The student will become familiar with growing practices, the importance of individual types of plants and their proper treatment.
• The student will expand his knowledge about plant reproduction, their requirements, and the proper harvesting of fruits.
• The student knows how to work more efficiently with tools and aids for growing plants.
Abilities:

• The student can understand agrotechnical concepts, procedures, and agriculturally essential works.
• The student can develop a complex seminar work and use the knowledge from it in practice.
• The student can use the acquired knowledge in practice and is also able to interpret it for other persons or students in the future teaching process.
Competencies:
• The student will develop a more positive attitude towards growing practices and gain more self-confidence in his abilities.
• Through a better understanding of cultivation operations, the student will acquire lifelong knowledge that will positively affect his attitude towards nature and the soil.
• The student is active in the pedagogical areas of education within his competencies; he takes responsibility for forming prejudices against cultivation procedures and their effective use in practice.

Brief syllabus:
1. Basic division of growing practices and their practical use
2. Function and method of use of basic types of tools and aids
3. Treatment and reproduction of plants, requirements of plants for habitat
4. Cultivation procedures - garden plants - vegetables 1
5. Cultivation practices - garden plants - vegetables 2
6. Cultivation practices - fruit trees and bushes 1
7. Cultivation practices - fruit trees and bushes 2
8. Cultivation practices - ornamental plants
9. Cultivation procedures - potted plants
10. Cultivation practices and their impact on the environment, agrochemistry
11. Cultivation practices in greenhouses, greenhouses and flower beds
12. Submission and presentation of seminar papers
13. Submission and presentation of seminar papers

Literature:
KOMONYI É.: Mezőgazdasági alapismeretek. - 1. vyd. - Ungvár : Líra Poligráfcentrum, 2013. - 184 s. - ISBN 978-617-596-129-2.
ÁNGYÁN JÓZSEF, MENYHÉRT ZOLTÁN. : Alkalmazkodó növénytermesztés, környezet- és tájgazdákodás / - 1. vyd. - Budapest : Szaktudás Kiadó Ház, 2004. - 559 s. - ISBN 963 9553 14 X.
HATVANI A., TOMCSÁNYI E.: Kertészeti növényvédelemi gyakorlatok : Növénykórtan és növényvédelmi állattan /. - 1. vyd. - Kecskemét : KFKFK, 2001. - 154 s.
Gyümölcs-, szőlő- és zöldségtermesztés, 2002 : KSH, 2002. - 30. - ISBN 0085723.
KOLTAY Z., VIOLA M.: Kertészeti termesztés speciális gépei - 1. vyd. - Kecskemét : Kertészeti és Élelmiszeripari Egyetem, 1998. - 229s.
ORLÓCI L.: Gyógynövények enciklopédiája. - Budapest : Ventus Libro Kiadó, 2005. - 320 s. ISBN 963 9546 30 5.
SZŐKE L.: Szőlőtermesztés - 1. vyd. - Kecskemét : Kertészeti Föiskola, 2000. - 192s.
TERBE I., HODOSSI S., KOVÁCS A.: Zöldségtermesztés termesztőberendezésekben. - 1. vyd. Budapest : Mezőgazda Kiadó, 2005. - 271 s. - ISBN 963 286 204 X.
WALTER S. J, S. CAMPBELL, A. KELLOGG, F. STEVENS, DONOGHUE, M.J. .: Plant Systematics : A phylogenetic approach. - 3. vyd. - Massachusetts : Sinauer Associates Inc., 2010. - 611 s. - ISBN 978 0 87893 407 2.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Ing. Iveta Szencziová, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ POZ/22	**Name:** Health development

Types, range and methods of educational activities:
Form of study: Lecture / Seminar
Recommended extent of course (in hours):
Per week: 1 / 1 **For the study period:** 13 / 13
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, students must meet the following requirements. A test (50%) must be written from the theoretical curriculum.
Evaluation of seminar work: planning of the thematic day of health (10%), presentation of literature (10%), analysis, evaluation (10%), reflection, drawing conclusions (10%), elaboration, language correctness (10%).
Total student load: 2 credits = 50-60 hours
26 hours of participation in contact classes; 20 hours of preparation of the educational activity project and tasks assigned in the lessons; 10-20 hours of self-study;
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student knows the holistic conceptual system and determinants of health
- The student has anatomical, physiological, genetic and ecological knowledge about the importance of factors determining and influencing health.
- The student knows the areas, tasks and methods of comprehensive school health support
- The student has scientific and methodological knowledge that supports the harmonious and complex development of the personality of children and youth and their full health development.
- The student knows the sociocultural definition, connections, components and determinants of health and can interpret the resulting differences.
- The student has a set of tools for differentiated pedagogical tasks of health development resulting from a comprehensive approach to health.
Abilities:

- The student can analyse domestic and international data on health statistics indicators
- The student can apply his knowledge of health science with a holistic approach and in an adaptive way
- The student can design and implement a thematic health day program considering children's individual characteristics, needs and age characteristics.

Competencies:
- The student undertakes to choose strategies, methods and activities that help systematise and expand the experience and knowledge of children and youth.
- The student commits to fully developing the health of children and youth.
- The student has a positive attitude toward the creation of a favourable school environment
- Through his example, the student plays a role in shaping health-conscious behaviour

Brief syllabus:

Lecture:

1. Bio-psycho-social conceptual framework of health, the concept of health education, health promotion, health education.
2. Analysis of domestic and international data on health statistics indicators.
3. The role of environmental and sociocultural influences in maintaining health.
4. The role of communities in promoting health, active participation in local programs instead of passive inclusion.
5. Health education and prevention place in the State Education Program and the School Education Program.
6. Areas, tasks and methods of comprehensive school health support.
7. Presentation of the possibilities of primary prevention at school, taking into account the developmental aspects of disadvantaged children with special educational needs
8. Aspects and tools of planning and evaluation of the school health promotion program - possibilities of special development for pupils with special educational needs
9. Planning the school health promotion program, organisational tasks, documentation, evaluation, considerations
10. Planning the thematic health day, its organisation, methods, tools, documentation, evaluation and reflection - theory 1.
11. Planning the thematic health day, its organisation, methods, tools, documentation, evaluation and reflection - theory 2.
12. Planning the thematic health day, its organisation, methods, tools, documentation, evaluation and reflection - theory 3.
13. Writing the test

Seminar:

1. Literary overview of the concept of health
2. Determinants of health, literature review.
3. Inequality in health, overview and analysis of statistical data
4. Overview of local health promotion programs.
5. Concept of health promotion school.
6. Practical implementation of comprehensive health support in schools, analysis of programs
7. Planning, organisation, methods, tools, documentation, evaluation of the thematic health day - reflection - practice
8. Planning, organisation, methods, tools, documentation, evaluation of the thematic health day - reflection - practice
9. Planning a thematic day of health - group work
10. Planning a thematic day of health - group work
11. Group student presentations and conducting exercises 1.

12. Group student presentations and conducting exercises 1.
13. Evaluation

Literature:

ČIHÁK, R.: Anatomie I.-III. Avicenum Praha, 1987, 1989, 1997. ISBN 80-7169-970-5
DYLEVSKÝ, I.: Somatológia. Bratislava : OSVETA, 2000. - 439 s. - ISBN 80-8063-127-1
LEHOTSKY Á, FALUS S, LUKÁCS Á, FÜZI R, GRADVOHL E, , MÉSZÁROSNÉ DARVAY S et al. Kortárs egészségfejlesztési programok közvetlen hatása alsó tagozatos gyermekek kézhigiénés tudására és megfelelő kézmosási technikájára. Orvosi Hetilap. Vol. 159, no. 12 (2018), p. 485-490.
MADER, S. S.: Human biology. Wm. C. Brown Publishers, USA, Third edition 1992. 500 s. - ISBN 0-697-12333-2
McCRACKEN, T.O.: Háromdimenziós anatómiai atlasz. Budapest : Scolar Kiadó, 2000. - 237 s. - ISBN 978-963-9193-99-4
NAGY, M.: Humánbiológia, Lilium Aurum, Dunaszerdahely, 2006, ISBN 80-8062-283-3.
SZENTÁGOTHAI, J.: Funkcionális anatómia I.-III. Budapest : Medicina Könyvkiadó, 2006. - 710, 600, 800. - ISBN 963 242 565 0
VITÁLYOS G. Á., DANCS G, BÄRNKOPFNÉ ZSOFFAY K, VENYINGI B, MÉSZÁROSNÉ DARVAY S. Egyetemi hallgatónők vérnyomásának tápláltsági állapotának és életvitelének összefüggései. Anthropologiai Közlemények, 59 (2018), p. 31-45.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ TEB/22	**Name:** Botanical fieldwork
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 4	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Protocol on botanical practice and preparation of a herbarium of 200 items from which students will be tested. The scientific name of 30 plants will be tested by random selection. Credits will not be awarded to a student who does not recognize at least 16 items out of 30 randomly selected from his herbarium. Total student workload: 4 credits = 100-120 hours The student will participate in field practice for 26 hours. It takes 75-100 hours for the post-harvest treatment of plant material, its inclusion in the herbarium and its determination with the help of the identification key and learning of the herbarium. The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: - A = 90-100% (90-100 points) - B = 80-89% (80-89 points) - C = 70-79% (70-79 points) - D = 60-69% (60-69 points) - E = 50-59% (50-59 points) - FX = 0 – 49% (0 – 49 points)	
Results of education: Knowledge: - The student will learn to make a herbarium of vascular plants. - The student knows the current law on nature and landscape protection. Abilities: - The student can identify higher plants according to the identification key. - The student can establish a handy herbarium in the future workplace. Competencies: - The student has a positive attitude towards plant protection.	
Brief syllabus: Fieldwork in the scope of 5 days.	

Students will learn to identify taller plants using an identification key. They collect plant material in various habitats for the preparation of herbarium. According to agreement and possibilities, they will take part in an excursion in the botanical garden or in the arboretum. Protected and endangered taxons will be documented with photographs—preparation of herbarium. Students will be familiar with the current law on nature and landscape protection.

Literature:

BALÁZS P., (2012): Základy systému krytosemenných rastlín – A zárvatermő növények rendszerének alapjai. Univerzita J. Selyeho – Selye János egyetem, Komárno ISBN 978-80-8122-054-8
GOJDIČOVÁ E., MÁRTONFI P., MÁRTONFIOVÁ L., (2008): Botanika-Cievnaté rastliny. Vydavateľstvo : Ústav vysokohorskej biológie Žilinskej univerzity ISBN 977808889223121
SIMON T., (2004) : A magyarországi edényes flóra határozója. Nemzeti tankönyvkiadó, Budapest. ISBN 963 19 1226 4
Aktuálny zákon NR SR o ochrane prírody a krajiny a súvisiace vyhlášky MŽP SR.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 2

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

Teacher: Ing. Pavol Balázs, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ VSB1/22	**Name:** General biology I.

Types, range and methods of educational activities:
Form of study: Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 2 **For the study period:** 26 / 26
Methods of study: present

Number of credits: 6

Recommended semester/trimester of study: 1.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Students prepare a collection of letters that contains 20 items. They characterize leaves morphologically, and at the end of the semester, they are tested on the morphology of the leaves. During the semester, there will be two written examinations from the botanical part and one from the zoological part at the end of the semester.
The final oral exam is half botanical and half zoological. Completing at least 50% of the botanical part and at least 50% of the zoological part is a condition for granting credits.
Total student load: 6 credits = 150-175 hours
The student will participate in 52 hours of contact lessons; the student works for 20 hours on the collection of leaves, their morphological description and preparation for the examination, and in the 25 hours of self-study; he prepares for one written examination from the botanical part (a total of 50 hours), for the examination from the zoological part is composed by self-study in the range of 50 hours.
The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student can identify the basic conceptual, categorical and methodological apparatus of the subject;
- The student has expanded knowledge in the field of related sciences and understands and categorizes connections from other scientific disciplines;
- By completing the subject, the student will acquire knowledge of the anatomy and morphology of higher plants and animals, which he can use in their identification.
Abilities:

- The student can recognize plant and animal organs.
- The student can apply theoretical knowledge to other botanical and zoological subjects.
Competencies:
- The student can soundly express himself in the scientific field of the anatomy and morphology of higher plants and animals.

Brief syllabus:
seminar 1. – part of botany
1., Definition of basic terms. A brief history of the issue.
2., Stem branching, types of branching, germination of higher plants.
3., Root: Primary and secondary structure of the root. Monocotyledonous and dicotyledonous roots.
4., Stem: Anatomy of the stem. The primary structure and its tissues. Secondary construction. Structure of the stem of monocotyledonous and dicotyledonous plants
5., Telomere theory.
6., Sheet: Basic structure and types of meshes. Leaf structure of gymnosperms and angiosperms.
7., Flower – flower structure, flower packaging, stamen, carpels
8., Floral formula and diagram
9., Introduction to plant embryology. Male genital organs, microsporogenesis, formation and structure of the pollen grain.
10., Female genital organs, megasporogenesis, germinal sac structure.
11., Introduction to plant embryology. Formation and structure of the embryo. The anatomical structure of the fetus. –
Pollination, fertilization, emergence and development of seed and fruit - embryogenesis.
12., Vegetative and generative plant reproduction.
13., Adaptations of plant organs to their environment
seminar 2. – part of zoology
1., Introduction to the issue
2., Covering systems of vertebrates
3., Support systems of vertebrates
4., Digestive systems of vertebrates
5., Circulatory systems of vertebrates
6., Respiratory systems of vertebrates
7. Excretory systems of vertebrates
8., Reproduction - asexual, sexual - vertebrates
9., Gland systems with the internal secretion of vertebrates
10., Nervous systems of vertebrates
11., Vertebrate sensory organs
12., Ontogenesis of animals - embryogenesis - vertebrates
13., Ontogenesis of animals, regulation of development, postembryonic development - vertebrates
exercise 1. – botanic part
1., Plant organs, characteristics, general morphological features
2., Metamorphosis and forms of the root.
3., Metamorphosis of the stem. - Morphology – meaning, phylogenetic, ontogenetic development,
4., Morphology and organology of the leaf I., leaf veins, shapes of the leaf blade,
5., Morphology and organology of leaf I., simple and compound leaves, leaf development, vernation and position of leaves on the stem.
6., Study control
7., Morphology – inflorescences simple and compound. Inflorescences fringed.
8., Apical inflorescences
9., Double fertilization of angiosperms

10., Types of true fruits,
11., Types of false fruits, propagation of seeds and fruits
12., Study control
13., Examining the morphology of leaves
exercise 2 – zoology part
1., Basic concepts
2., Covering systems of invertebrates
3., Support systems of invertebrates
4., Digestive systems of invertebrates
5., Circulatory systems of invertebrates
6., Respiratory systems of invertebrates
7., Excretory systems of invertebrates
8., Reproduction - asexual, sexual - invertebrates
9., Gland systems with the internal secretion of invertebrates
10., Nervous systems of invertebrates and vertebrates
11., Sensory organs of invertebrates
12., Ontogenesis of animals - embryogenesis - invertebrates
13., Ontogenesis of animals, regulation of development, postembryonic development - stateless

Literature:

BAKONYI, G.: Álattan. Mezőgazda Kiadó. 2003. 718 s. - ISBN 963 286 044 6.
BELÁKOVÁ, A.: Rozmnožovanie a ontogenéza živočíchov. Bratislava : Univerzita Komenského v Bratislave, 1994. 80. ISBN 8022307319.
CSÖRGŐ et al.(eds.) Magyar madárvonulási atlasz. Kossuth Kiadó, 2009.,672 s. - ISBN 978-963-09-5865-3.
HARASZTY Á., (1990): Növényszervezettan és növényélettan. Tankönyvkiadó, Budapest ISBN 963 18 3006 3
KRISKA, G., LŐW, P.: Biológia érettségire felkészítő. Állati szervezetek. Nemzeti Tankönyvkiadó, 222. o. + DVD. 2012 223 s. - ISBN 978-963-19-7109-5.)
TUBA Z., SZERDAHELYI T., ENGLONER A., NAGY J., 2013 : Botanika I. Sejttan, szövettan alaktan. Nemzeti tankönyvkiadó, Budapest. 28O s ISBN : 978-963-19-5848-5.)
ZBORAY, G.: Összehasonlító anatómiai praktikum I. - A gerinctelenek - Anamnia-
Az alacsonyabbrendű gerincesek. Nemzeti Tankönyvkiadó, 2014, 486 s. - ISBN 978-963-19-6819-4.)
ZBORAY, G.: Összehasonlító anatómiai praktikum II. Amniota. Magasabbrendű gerincesek. ELTE Eötvös Kiadó Kft., 2007, 480 s. - ISBN 978-963-19-6000-6.)

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 24

A	B	C	D	E	FX
8.33	4.17	12.5	12.5	16.67	45.83

Teacher: Ing. Pavol Balázs, PhD., PaedDr. Daniel Dancsa

Date of last update: 13.07.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ VSB2/22	**Name:** General biology II.

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 1 / 1 **For the study period:** 13 / 13 / 13
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 2.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, students must meet the following requirements:
Total student workload: 5 credits = 125-150 hours
The student participates in 39 hours of contact classes, 15 hours of preparation of tasks given at seminars, 16 hours of self-study for the written examination from the seminar section, and 15 hours of preparation of protocols and preparation for the oral exam by self-study of 40 hours.
The final assessment is as follows: Protocols - 10%, written examination from the seminar part - 30%, oral exam - 60%. The condition for successful subject completion is obtaining at least 50% from each part of the subject evaluation.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student will get to know more thoroughly the structure of every organ of the human body, including cytology and histology.
- The student knows the structure of each organ and the human organ system.
- The student knows the relational system of each organ system and can think at the system level
- The student has expert anatomical knowledge that supports his health knowledge.
- The student knows the main anatomical terms of the Hungarian, Slovak and Latin equivalents.
- The student knows the rules of laboratory work.
- The student knows the basics of classical genetics
Abilities:
- The student can independently collect information from the field of anatomy
- The student can apply theoretical knowledge in practice
- The student can navigate anatomical diagrams, models
- The student can assemble the human skeleton using diagrams

- The student can determine the age and gender of human bones using specialized materials
- The student can examine the morphology of pig organs
- The student can keep minutes of his laboratory work
- The student can explain the functioning of the central dogma also using examples
- The student can solve examples of classical genetics

Competencies:
- The student has a positive attitude toward learning about the human body
- The student undertakes to protect the human body
- The student commits to evidence-based scientific thinking
- The student has the competence to solve simple problems of monogamous inheritance

Brief syllabus:

1. Anatomical nomenclature. Axes, planes, and directions on the human body.
2. Skeletal system. Anatomy of the trunk, skull, upper and lower limbs.
3. Muscular system. Main muscle groups of the head, neck, torso, upper and lower limbs.
4. Respiratory system. Anatomy of the lower and upper respiratory tract.
5. Digestive system. Anatomy of some organs of the digestive system.
6. Circulatory system. Structure of the heart. Vessels. Lymphatic system. Spleen, lymph.
7. Excretory system. Anatomy of the urinary tract and kidneys.
8. Sexual system. Male genitals. Female genitals.
9. Parts of the central nervous system and brain.
10. Nervous system: parts of the central nervous system, spinal cord.
11. Nervous system: the peripheral nervous system. Cerebral and spinal nerves.
12. Sensory organs. Sight, hearing and balance organs,
13. Sensory organs. Anatomy of smell, taste and skin.

Seminars:

1. Introduction to the issue of inheritance.
2. Brief history of genetics.
3. Definition of basic genetic concepts. Basics of genetic terminology.
4. Genetic code.
5. Central dogma.
6. Practicing examples from replication, transcription and translation
7. Basics of regulation of genetic systems.
8. Mendel's laws I.
9. Mendel's laws II.
10. Calculation of examples of crossing monohybrid, dihybrid
11. Calculation of examples of complete crossing dominance, incomplete dominance
12. Calculation of examples of the crossing of gonosomal inheritance
13. Summary

Literature:

BORISSZA E., VILLÁNYI A., ZENTAI G. Ötösöm lesz genetikából - 5. vyd. - Budapest : Műszaki Könyvkiadó Kft., 2006. - 319 s. - ISBN 963 16 2836 1.
CAMPBELL, A. M., HEYER, L. J. Genomika, proteomika, bioinformatika - 1. vyd. - Budapest : Medicina Könyvkiadó Rt., 2004. - 381 s. - ISBN 963 242 882 X.
ČIHÁK, R.: Anatomie I.-III. Avicenum Praha, 1987, 1989, 1997. ISBN 80-7169-970-5
DYLEVSKÝ, I.: Somatológia. Bratislava : OSVETA, 2000. - 439 s. - ISBN 80-8063-127-1
MADER, S. S.: Human biology. Wm. C. Brown Publishers, USA, Third edition 1992. 500 s. - ISBN 0-697-12333-2

MARÓY, P. Genetika BS - 3. vyd. - Szeged : Jate Press, 2014. - 281 s. - ISBN 978-963-306-003-2.
McCRACKEN, T.O.: Háromdimenziós anatómiai atlasz. Budapest : Scolar Kiadó, 2000. - 237 s. - ISBN 978-963-9193-99-4
NAGY, M.: Humánbiológia, Lilium Aurum, Dunaszerdahely, 2006, ISBN 80-8062-283-3.
SZENTÁGOTHAI, J.: Funkcionális anatómia I.-III. Budapest : Medicina Könyvkiadó, 2006. - 710, 600, 800. - ISBN 963 242 565 0
PORÁČOVÁ, J., NAGY, M. a kol.: General and Applied Biochemistry for Natural-Sciences – 1. vyd. – Budapest: Műszaki Pedagógia Tanszék, 2021. – 223 s. – ISBN 978-963-421-847-0.
PORÁČOVÁ, J., VAŠKOVÁ, J., NAGY, M. a kol. 2015. Všeobecná genetika. Prešov: FHPV PU. 397 s. ISBN 978-80-555-1523-6.
PORÁČOVÁ, J., MARIYCHUK, R., NAGY. M. a kol.: Základné biochemické procesy organizmov – 1. vyd. – Prešov: Prešovská univerzita v Prešove, Fakulta humanitných a prírodných vied - 2015. – 343 s. – ISBN 978-80-555-1514-4.
SNUSTAD, D. P., SIMMONS, M. J. 2009. Genetika. Brno: Masaryková univerzita. 894 s. ISBN 978-80-210-8613-5.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 15

A	B	C	D	E	FX
20.0	6.67	0.0	46.67	13.33	13.33

Teacher: Dr. habil. PaedDr. Melinda Nagy, PhD., Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ ZET/22	**Name:** Basics of ecotoxicology
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 5.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: A condition for passing the subject is active participation in seminars. The evaluation consists of a presentation and writing of a seminar paper on a freely chosen topic related to ecotoxicological problems (range min. five pages, max. ten pages). Evaluation criteria: - Summary of the issue according to currently available professional literature, drawn from relevant professional publications (40%) - Requirements for content, form, and graphic, image documentation (20%). - Elaboration of the presentation of the issues of the seminar work (40%). In the final part, the student proves his theoretical knowledge by completing the test. Final evaluation: share of seminar work and written exam on the grade: 50% - 50%. Total student load: 2 credits = 50-60 hours 26 hours of participation in contact lessons; 15 hours of preparation of seminar work and presentation; 9-19 hours of self-study and test preparation; The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject. Overall evaluation of the success of the subject: - A = 90-100% (90-100 points) - B = 80-89% (80-89 points) - C = 70-79% (70-79 points) - D = 60-69% (60-69 points) - E = 50-59% (50-59 points) - - FX = 0 – 49% (0 – 49 points)	
Results of education: Knowledge: - The student can characterize terms such as toxicity and poisons and determine the factors of the degree of toxicity. - The student can define mutagens, teratogens and carcinogens and classify them. - The student can describe industrial and agricultural pollutants and connect this knowledge with ecology. - The student can list and characterize individual types of toxic tests, their role and evaluation methods, goals of ecotoxicological studies and characterize commonly used test organisms.	

Abilities:
- The student can classify ecotoxicology among other scientific disciplines to characterize its importance for living organisms.
- The student can explain the importance of studying toxic substances for all living systems, such as plants, animals and humans.
- The student can explain the principles of toxicology in the context of ecology, nature protection, and health science.
- The student can use his knowledge in the teaching process by explaining the various consequences of industrial and agricultural disasters, which had a severe impact on the health of animals and people, as well as on the pollution of soil, water, air and thus also on the development of living organisms.
Competencies:
- The student has a positive attitude toward nature by knowing dangerous substances for ecosystems.
- The student has a positive attitude toward the creation of objective knowledge in the next generation; with his knowledge, he can increase the attitude of children towards the protection of the environment and their health and encourage them to take responsibility for the protection of nature and health at the individual level.
- The student is open to possible collaborations, participatory programs, new theories and methods, and their application and integration in the field of sustainability.
- The student can engage in an emotional, ethical approach and positive culture formation in his own life and the lives of the people around him.
- The student, as an active citizen, is responsible in the pedagogical areas of education within his competencies; he takes responsibility for the ecological formation of his environment, living space and community.

Brief syllabus:
1. Introduction to the issue of ecotoxicology - history of ecotoxicology. Place of ecotoxicology in toxicology, connection with environmental protection, subject of ecotoxicology.
2. Toxicity, poison, toxicity rate factors - dose, duration of effect, route of exposure, species used for toxicity rate testing.
3. Ecosystems and ecotoxicology, micropollutants, as environmental stressors, heavy metals, pesticides, the mutagenic, teratogenic and carcinogenic effect of substances, poisons.
4. Industrial and agricultural pollutants, chlorinated hydrocarbons, organophosphorus esters, triazines, polychlorinated biphenyls, and dioxins.
5. Types of toxicological tests, acute and chronic tests, the role of single-species tests and their evaluation, and the role of multi-species tests and their evaluation.
6. Ecotoxicological studies, geno- and cytotoxicological studies, and ecotoxicological measurements.
7. Commonly used test organisms, standard test methods: bacterial bioassays, plant tests, animal tests.
8. The fate of toxic substances in environmental systems: bioindication, bioaccumulation, bioconcentration and biomagnification,
9. Measurement of biodegradation in ecotoxicological studies, biodegradation process, practical applicability, biodegradation testing techniques.
10. Ecotoxicology and risk assessment, early warning systems, environmental impact assessment, biomarkers, biosensors, bioindicators.
11. Microcosm, mesocosm, field experiments and bioremediation technology.
12. Toxicological limits, standard systems, authorization procedures.
13. Repetition, a summary of the curriculum.

Literature:

CALOW, P.: Handbook of Ecotoxicology - 1. vyd. : Blackwell Science, 1998. - 885 s. - ISBN 0 632 04933 2.
DARVAS, B., SZÉKÁCS, A.: Mezőgazdasági ökotoxikológia – 1. vyd. – Budapest: L Harmattan, 2006. – 382 s. – ISBN 963 7343 39 3.
KOMONYI, É.: Életvédelem I.: Környezeti veszélyek és károsító tényezők – 1. vyd. – Ungvár: PoliPrint, 2010. – 105. s. – ISBN 978-966-2596-05-5.
KVASNIČKOVÁ, D.: Životné prostredie - 1. vyd. Bratislava: Slovenské pedagogické nakladateľstvo, 2002. 160 s. ISBN 80-08-03341-X
TOMPA, A.: Kémiai biztonság és toxikológia – 1. vyd. – Budapest: Medicina Könyvkiadó, 2005. – 466 s. – ISBN 963 242 926 5.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: RNDr. Eva Tóthová Tarová, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ ZUR/22	**Name:** Basics of sustainable development

Types, range and methods of educational activities:
Form of study: Seminar
Recommended extent of course (in hours):
Per week: 2 **For the study period:** 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 1.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The subject is evaluated by a final knowledge test (100 points) and the preparation of a seminar paper on the subject.Total student workload: 3 credits = 75-90 hours
The student will participate in 26 hours of teaching. He works for 20 hours preparing the seminar paper and for the test by self-study in the range of 30-45. The condition for successful completion of the subject is obtaining at least 50% of the maximum point evaluation of the subject.
Overall evaluation of the success of the subject:
- A = 90-100% (90-100 points)
- B = 80-89% (80-89 points)
- C = 70-79% (70-79 points)
- D = 60-69% (60-69 points)
- E = 50-59% (50-59 points)
- FX = 0 – 49% (0 – 49 points)

Results of education:
Knowledge:
- The student knows the content of the term sustainable development
- The student knows the UN Sustainable Development Goals
- The student systematically perceives the interconnectedness of the environment, human society and the economy.
- The student knows the current state of the biosphere and knows the reasons and consequences of man-made destruction.

Abilities:
- The student can identify and process Sustainable Development problems based on his information collection.
- The student can reveal the system relationships of the Sustainable Development goals.
- The student can distinguish between sustainable and unsustainable processes and their reasons.
- The student can recognize the interconnectedness of local and global problems.
- Based on his ecological, social and economic knowledge, the student is capable of critical thinking.
- Based on his natural science education, the student can correctly perceive and evaluate man's negative impact on the biosphere.

- The student can propose local solutions.
Competencies:
- The student takes a positive attitude towards the phenomena of the biosphere.
- The student feels his responsibility for the future, respects his animate and inanimate surroundings,
- By his conviction, the student will lead his surroundings to a positive attitude toward Sustainable Development.

Brief syllabus:
1. Definition, interpretation, and development of the concept of sustainable development.
2. Origin and characteristics of the Millennium Development Goals and Sustainable Development Goals.
3. Systemic interconnectedness of nature, society and economy. Megatrends 20.-21. Centuries.
4. Climate change in the Anthropocene - the dimension of TUR.
5. Causes and consequences of the destruction of the biosphere by man. Living planet report 2020.
6. The current state of our planet in the light of sustainability numbers. Ecological footprint, carbon footprint, etc.
7. Systems thinking, systemic evaluation of ecological disasters.
8. State of the EU environment (SOER2020 report)
9. The main principles of the regulation of the protection of the atmosphere, climate, hydrosphere, pedosphere and nature protection of the EU.
10. Global risks and challenges affecting human health and well-being.
11. Sustainable way of life, reduction of consumption
12. Global problems, local solutions, good examples.
13. Global problems, local solutions, good examples.

Literature:
HOLÉCZYOVÁ, G. – ČIPÁKOVÁ, A. - DIETZOVÁ, Z.: Hygiena životného prostredia. 1. vyd. - Košice : Univerzita Pavla Jozefa Šafárika, 2011. ISBN 978 80 7097 892 4. 201 s.
MONSPART, E. – TROMBITÁS, G (1998).: 101 lépés a fenntartható világ felé. 1. vyd. - Budapest : Környezeti Tanácsadók Egyesülete, 120 s.
SCHMUCK, E.: A "Fenntarthatóság" első éve : A riói környezet és fejlődés világkonferencia tízéves évfordulójának alkalmából 1. vyd. : Magyar Természetvédők Szövetsége, 2002. 31s.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Ing. Pavol Balázs, PhD.

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdb/ ŠS/22	**Name:** State Examination

Types, range and methods of educational activities:
Form of study:
Recommended extent of course (in hours):
Per week: For the study period:
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study:

Level of study: I.

Prerequisites:

Conditions for passing the subject:
All students who have met the requirements of the programme of study in the final year of their studies may take the state examination at the regular time according to the study schedule.
In the oral state examination, the student gives an account of his/her knowledge and skills in his/her field of specialisation and the interdisciplinary connection with the relevant fields of specialisation. The student demonstrates the ability to communicate information, ideas, problems and solutions to professional and lay audience.
The state examination takes the form of a colloquium in which the student's performance is assessed on a scale from A to FX. The grade counts for the overall state examination grade. The oral examination is graded on the following scale: A - 100-91%, B - 90-81%, C - 80-71%, D - 70-61%, E - 60-50%. A student who fails to achieve 50% receives no credit.
The results of the state examination and the thesis defence are publicly announced by the chair of the board.

Results of education:
Knowledge:
- the student has acquired knowledge in the compulsory and profile subjects of the study programme,
- the student is able to define and interpret basic concepts in his/her own words, to explain and describe basic processes, to characterise and to apply academic methods of research in the areas indicated in the subject's thematic plan,
- the student is able to analyse and evaluate the knowledge acquired in the subject.

Skills:
- the student is able to present his/her expertise,
- the student is able to hand over his/her knowledge
- the student is able to organise and apply the theoretical knowledge acquired,
- the student has the ability to organise and apply the knowledge acquired in the course of his (her) studies.

Competences:
- the student is able to express his/her linguistic and professional culture in the oral examination,
- the student is able to use the knowledge acquired in a wider context,
- the student is able to put the knowledge acquired into practice and organise it,

- the student is able to use his/her knowledge in a creative way while solving problems, as well as to analyse the problem and organise new solutions,
- the student is able to answer the questions of the committee at the expected level.

Brief syllabus:
I. Biodiversity and ecology of taxons of plants, animals and fungi
II. Anatomy, morphology and physiology of plants, animals and humans
III. Basics of chemistry, biochemistry, molecular biology and genetics

Literature:
Literature indicated in the information sheets of the study programme

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher:

Date of last update: 23.05.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ DBAU/22	**Name:** Database Application Development

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 0 / 2 **For the study period:** 0 / 0 / 26
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, students solve practical problems for which they can get 50 points. At the end of the semester, students will complete a term project for which they may receive 50 points. A grade is at least 90 points, B grade is at least 80 points, C grade is at least 70 points, D grade is at least 60 points and E grade is at least 50 points. A student who scores less than 50 points cannot receive credit.

Results of education:
Educational results - knowledge:
After completing the subject, the student:
• After completing the subject, the student knows the basic principles of creating dynamic websites and applications,
• They will gain knowledge about the potential uses, advantages and disadvantages, as well as the use of professional terminology.
Learning outcomes - skills:
After completing the subject, the student:
• capable of creating a web application with a database connection
• to establish a connection between the client and the server.
• for application creation, login, user management,
• can design web application architecture independently,
• implements the server and client part, as well as the communication protocols between the components.
Educational results - competences:
After completing the subject, the student:
• After completing the course, the student is able to create interactive web applications.
• They can use their knowledge as a web developer, as a developer of a complete web solution (full-stack developer),
• Able to create web database solutions and develop administration pages or company websites, for the development of an information visualization system, for the display of aggregated information.

Brief syllabus:

1. Application creation process, users, requirements, specifications.
2. Design of actors, objects, data identification, individual-relationship diagram.
3. Relational database design, relational database management, database implementation.
4. Identification and representation of processes, determination of the necessary source data.
5. Translation of queries into the language of the database system.
6. Definition of input requirements, implementation, implementation with the help of forms.
7. Preparation of summaries, statistics, complex queries.
8. Making a report.
9. System debugging with additional functions of the database system.
10. Creating macros.
11. Making an offer.
12. Setting up and managing user access.
13. System integration.

Literature:

1. MILES, R. (2019). C# Programming. Yellow Book “Cheese” Edition 8.1.
2. NAKOV, S. et al (2013). FUNDAMENTALS OF COMPUTER PROGRAMMING.
3. WITH C#. Sofia ISBN 978-954-400-773-7.
4. BÁRTFAI, B. – BUDAVÁRI, O.: Adatbázis-kezelés. BBS-INFO Kft., 2002. - 138 s. - ISBN 9630034441.
5. RESCA, S. (2019). Hands-On RESTful Web Services with ASP.NET Core 3: Design production-ready, testable, and flexible RESTful APIs for web applications and microservices. ASIN¶:ƒB07MXLQR34
6. KOLOSZÁR, L. – TÓTH, Zs.: Adatbázis-kezelés. Nyugat-magyarországi Egyetem, 2012.
7. https://baranyilaszlozsolt.com/pciskola/Adatbazis_80.o.pdf

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Distribution of student workload:
60% - attending classes, studying at home and preparing for exams,
40% - study of professional literature, practice of acquired knowledge, work on practicals assignments, preparation of semester work.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Dr. habil. Attila Elemér Kiss, CSc., László Marák, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/DEI/22	**Name:** History of Informatics and ICT

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 2 / 0 **For the study period:** 0 / 26 / 0
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 1.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Over the course of the semester, students study the history of computing and computer science from relevant book sources and the Internet. There are 2 quizzes during the semester that each student must take. The course ends with an exam. Grading is determined by the average of the 2 tests, each of which a student must pass at least 50% to be admitted to the exam.
The student is classified according to the average obtained in the tests (50%) and the exam (50%). A score of at least 90% is required for a grade of A, at least 80% for a grade of B, at least 70% for a grade of C, at least 60% for a grade of D, and at least 50% for a grade of E. Credit will not be awarded for a course if the student is not at least 50% successful.

Results of education:
Knowledge:
Students will know the tools and methods used to store and organize data in the development of computer science and computing. They know the history of computing, computers and computer science. Students know the basic principles of operation and basic concepts of not only computers but also their peripherals. They know the personalities who have contributed substantially to the development of computer science, computing and information and communication technologies not only on a global but also on a national scale.
Skills:
Upon successful completion of the course, students will be prepared to recognize and use the methods and tools they have learned and will be able to learn about new developments. They will be able to work independently, study the literature, present results and critically evaluate them.
Competences:
Upon successful completion of the course, students will be prepared to teach the methods and use the tools they have learned. They understand the links between the development of the underlying fields of computer science and computing itself.

Brief syllabus:
1. The development of counting from antiquity to the Middle Ages (tools used).
2. Demonstration of mechanical devices supporting the performance of the four basic operations (modern era).
3. Demonstration of mechanical devices supporting the performance of the four basic operations (recent era).

4. The transmission system invented by Charles Babbage.
5. Computing tools developed in the early 20th century.
6. Electromechanical devices used during World War II. 7. The first computer developed by John von Neumann.
8. The computer generation.
9. Punch plate, punch tape, method of entering all data. 10. Magnetic data storage, magnetic tape, HDD, optical data storage.
11. Development of processors, increasing computing capacity.
12. Data display modes (cathode ray tube monitors, needle printers, dot matrix and serial printers)

Literature:

1. STOFFA, V. a kol. Az informatika alapjai I. (Základy informatiky I.) 1. vyd. Komárno : Univerzita J. Selyeho, 2007. 369 s. ISBN 978-80-89234-29-5
2. STOFFOVÁ, V. a kol. Informatika, informačné technológie a výpočtová technika. Terminologický a výkladový slovník. Nitra : FPV UKF, 2001. 230 s. ISBN 80-8050-450-4.
3. ZELENÝ, J. – MANNOVÁ, B. Historie výpočetní techniky. Praha : Scientia, 2006. 184 s. ISBN 80-86960-04-8.
4. STOFFA, V.: Információs és kommunikációs technológiák a gyakorlatban I. Komárno 2008, Valeur, 321 str. ISBN 978 80 89234 69 1.
5. STOFFA, V.: Informačné a komunikačné technológie v praxi I. Komárno 2008, Valeur, 321 str. ISBN 978 80 89234 69 1.
6. KATONA GYULA Y. : A számítástudomány alapjai. Typotex Elektronikus Kiadó Kft., 2002, 192 s. ISBN 963 9326 24 0.
7. ZWETLER, O. – NEČAS, C. Dejiny věd a techniky I. Brno : MU, 1992. 97 s. ISBN 80-210-0401-0.
8. DLUHOŠ, J. – VALA, M. Vybrané kapitoly z dejín techniky. Ostrava : PdF OU, 1996. 61 s. ISBN 80-7042-112-6.
9. HOUDEK, F. Objevy a vynálezy tisíciletí. Praha : NLN, 2002. 456 s. ISBN 80-7106-475-0.
10. PATURI, F. Kronika techniky. Bratislava : Fortuna Print, 1993. 654 s. ISBN 80-7153-065-4.
11. REID, S. Vynálezy a objevy. Ostrava : Blesk, 1994. 128 s. ISBN 80-85606-52-6.
12. ZEITHAMMER, K. Vývoj techniky. 2. vyd. Praha : ČVUT, 1998. 274 s. ISBN 80-01-01725-7.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Distribution of students' workload:
40% - participation in classes, preparation for examinations and exams, 60% - study of literature, preparation of term papers.

Evaluation of subjects
Total number of evaluated students: 9

A	B	C	D	E	FX
0.0	0.0	0.0	55.56	44.44	0.0

Teacher: PaedDr. Márk Csóka, Dr. habil. Dr. Gábor Kiss, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ DMI/22	**Name:** Discrete Mathematics for Computer Science

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 1 / 0 **For the study period:** 26 / 13 / 0
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 4.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, students work independently on homework in online system weBWorK, for which they can receive a total of 30 points. The course is finished by an exam where it is possible to obtain 70 points. For assessment A should be obtained at least 90 points, for assessment B at least 80 points, for assessment C at least 70 points, for assessment D at least 60 points, for assessment E at least 50 points.

Results of education:
Educational outcomes - skills:
At the end of the course, students will know the basic mathematical tools necessary to complete the theoretical informatics courses.
Educational outcomes - competencies:
At the end of the course, students will know the relevant knowledge from disrete matehmatics for teaching computer science in primary and secondary school level.

Brief syllabus:
1. Introduction to the Discrete Mathematics, Peano axioms, principle of Mathematical induction.
2. Set Theory – basic terms, set operations.
3. Relations and mappings, composition of mappings, equivalence relation.
4. Combinatorics – combinations and variations (with and without repetition).
5. Permutations (with and without repetition), combinatorial identities.
6. Binomial and Polynomial theorem, Inclusion–exclusion principle
7. Propositions and logical operations, tautologies.
8. Boolean algebra – binary Boolean functions, realization of Boolean functions by formulas, Equivalence of Boolean formulas, properties of elementary Boolean functions, principle of duality.
9. Canonic form of Boolean functions, full disjunctive normal form,
Minimization of Boolean functions.
10. Divisibility, the fundamental theorem of arithmeti, euclidean algorithm
11.Properties of prime numbers, solving linear diophantine equations
12. Elementary graph theory

Literature:
1. JABLONSKIJ, S. V.: Úvod do diskrétnej matematiky. Bratislava : Alfa, 1984., 278 s.

2. JABLONSKIJ, S. V. a kol.: Diszkrét matematika a számítástudományban. Budapest : Műszaki
3. Könyvkiadó, 1980. 354 s. ISBN 978-963-1025-99-3
4. SZENDREI, Á.: Diszkrét matematika. Szeged : Polygon, 1998. 380 s. ISSN 1417-0590.
5. LOVÁSZ, L. – VESZTERGOMBI, K. – PELIKÁN, J.: Diszkrét matematika. Budapest :
6. Typotex, 2006. 292 s. ISBN 978-963-9664-02-9.
7. Csabina, Zoltánné: Matematika példatár 1.: Halmazelmélet, sorozatok
8. (https://dtk.tankonyvtar.hu/xmlui/bitstream/handle/123456789/8037/0027_MAT1.pdf?sequence=1)
9. Combinatorics: An Intuitive Introduction (https://www.probabilisticworld.com/intuitive-introduction-combinatorics/)

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Students' load distribution:
40% - direct teaching, preparation for the exam
60% -study of teaching materials, work on homework

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: doc. RNDr. József Bukor, PhD., RNDr. Štefan Gubo, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ DS1/22	**Name:** Database systems

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 0 / 2 **For the study period:** 13 / 0 / 26
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, students write two written papers, which are evaluated as a percentage. Students must achieve a score of at least 50% for both written papers in order to take the exam. During the semester, students work independently on a semester assignment or project (database management assignment). The combined exam consists of a written and oral part. To pass the exam, students must achieve at least 50% in the oral exam. The students are classified based on the obtained average, which includes the continuous performance of the semester, the work of the semester project and the result of the exam.
A grade is at least 90 points, B grade is at least 80 points, C grade is at least 70 points, D grade is at least 60 points and E grade is at least 50 points. A student who scores less than 50 points cannot receive credit.

Results of education:
Educational results - knowledge:
After completing the subject, the student:
• knows terms related to databases and their management.
• knows the characteristics of different database systems, the design of relational databases, the SQL language, the principles of creating forms and reports.
Learning outcomes - skills:
After completing the subject, the student:
• knows how to manage, use, query and create database systems.
Educational results - competences:
After completing the subject, the student:
• able to solve data management tasks using a database management system, formulate queries, prepare reports and forms.

Brief syllabus:
1. Basic concepts of database management, SQL language.
2. Relational data model, one-table SQL query.
3. Diagram of Entity-relationships, one-table complex queries in SQL.
4. Conversion of the diagram of relations into a relational database scheme, SQL query aggregation.
5. Normal forms, functional dependencies, multi-table SQL queries.

6. Decomposition into normal form, SQL queries using subqueries.
7. Creating databases, handling null values in SQL.
8. Updating data in SQL.
9. Management of access privilages and transactions.
10. Use of a database management system, data entry.
11. Use of a database management system, querying data.
12. Use of a database management system, creating forms.
13. Use of a database management system, creating reports.

Literature:

1. BALÁZS, P. – NÉMETH, G.: Adatbázisok. [Digitális Tankönyvtár]. Online dostupné: https://dtk.tankonyvtar.hu/xmlui/bitstream/handle/123456789/13212/adatbazisok.pdf
2. BÁRTFAI, B. – BUDAVÁRI, O.: Adatbázis-kezelés. BBS-INFO Kft., 2002. - 138 s. - ISBN 9630034441.
3. RESCA, S. (2019). Hands-On RESTful Web Services with ASP.NET Core 3: Design production-ready, testable, and flexible RESTful APIs for web applications and microservices. ASIN¶ : ˛B07MXLQR34
4. KOLOSZÁR, L. – TÓTH, Zs.: Adatbázis-kezelés. Nyugat-magyarországi Egyetem, 2012.
5. https://baranyilaszlozsolt.com/pciskola/Adatbazis_80.o.pdf

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Distribution of student workload:
50% - participation in lessons, preparation for background checks and exams,
50% - study of professional literature, practice of acquired knowledge, work on practicals assignments, preparation of semester work.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Dr. habil. Attila Elemér Kiss, CSc., László Marák, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ GED/22	**Name:** Graphics editors
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 0 / 2 **For the study period:** 0 / 0 / 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the semester, students' activity on the laboratory exercises is evaluated (with maximum score of 25 points). During the semester, students independently work on 3 semester projects (Paint.NET, Gimp and Inkscape), for which a total of 75 points can be obtained. The output of each project should be a tutorial. At the end of the semester, the students submit the finished tutorials in the form of a video together with documentations in text files, and these are evaluated. To receive grade A in the course, student must obtain at least 90 points, for grade B at least 80 points, for grade C at least 70 points, for grade D at least 60 points and for grade E at least 50 points. Credits will not be given to a student who obtain less than 50 points.	
Results of education: Knowledge: After completing the subject, the student: • has practical knowledge of raster graphics and vector graphics. Skills: • is able to use raster and vector graphics editors at an advanced level, • is able to edit digital photography, work with tools, layers, filters, adjustments and effects, • knows the rules of creation of documentations for semester projects. Competencies: • is able to work independently and efficiently with graphics editors.	
Brief syllabus: 1. Basic terms of Computer graphics – vector and raster graphics, graphics file formats. 2. Raster graphics, overview of raster graphics editors (Paint.NET, Gimp). 3. Environment of the graphics editor: design area, grid, tool palette, status line, color palette, selection tools. 4. Work with drawing tools: paintbrush, pencil, eraser, magic wand, paint bucket, clone stamp, recolor, text tool. Drawing filled and unfilled rectangles (squares) and ellipses (circles). 5. Selection tools: rectangle select, ellipse select, operations on selections. Object selection and deselection, resize, translation, rotation, crop. 6. Work with text: inserting and editing text.	

7. Work with layers: add and delete layers, layer selection, layer properties, changing the order of layers.
8. Raster image creation and processing.
9. Digital photo editing.
10. Work with adjustments and effects. Installing new plugins.
11. Vector graphics, overview of vector graphics editors (Inkscape).
12. Vector image creation and processing.
13. 3D graphics, overview of 3D graphics editors (Blender).

Literature:

1. TAKÁČ, O.: A számítógépes grafika. Komárno : Univerzita J. Selyeho, 2016. 370 s. ISBN 978-80-8122-182-8.
2. SZIRMAY-KALOS, L.: Számítógépes grafika. Budapest : ComputerBooks. 2003, 334 s. ISBN 978-963-6182-08-6.
3. NĚMEC, P.: GIMP 2.8 : Uživatelská příručka pro začínající grafiky. Brno : Computer Press, 2013. 272 s. ISBN 978-80-251-3815-1.
4. ŠIMČÍK, P.: Inkscape : Praktický průvodce tvorbou vektorové grafiky. Brno : Computer Press, 2013. 296 s. ISBN 978-80-251-3813-7.
5. BELAN, A.: Blender - malý úvod do 3D modelovania a animácie. Bratislava, 2008. Dostupné na: http://www.smnd.sk/anino/moje/blender/Blender.pdf
6. Paint.NET, https://forums.getpaint.net/
7. Gimp, https://www.gimp.org/tutorials/
8. Inkscape, https://inkscape.org/forums/

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Distribution of the student's workload:
35% of the workload - direct teaching, preparation for laboratory exercises.
65% of the workload - studying the literature, practicing the acquired knowledge, work on the semester projects.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: RNDr. Štefan Gubo, PhD., PaedDr. Márk Csóka

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KINF/HW/22 | **Name:** Computer Hardware

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 0 / 2 **For the study period:** 0 / 0 / 26
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 2.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
There will be one written examination for 40 points during the semester. In seminars, students' active approach will also be assessed for 20 points. A grade of A requires at least 90% points, a grade of B requires at least 80% points, a grade of C requires at least 70% points, a grade of D requires at least 60% points, and a grade of E requires at least 50% points. Credit will not be awarded to a student who scores less than 50% on the written examination.

Results of education:
Knowledge:
After completing the course, the student knows the basic principles of logic circuits. The student knows the basic logic operators and logic modules. The student knows the internal components of computers and the operation of basic components such as the arithmetic and logic unit, control unit and memory. The student knows the basic differences between different architectures.
Skills:
After completing the course, the student is able to design simple logic circuits using simulation programs. The student is able to implement simple logic modules, memory modules, comparators and registers.
Competencies:
After completing the course, the student is proficient in the theory of logic circuits, is familiar with the internal components of computers, and is proficient in understanding the basic functions of the components. The student can recognize the differences between different architectures and is aware of the advantages and disadvantages of each architecture.

Brief syllabus:
1. Current, voltage, charged particles, electrical resistance, semiconductors and semiconductor components.
2. Fundamentals of logic circuits, diodes and transistors
3. Logic circuits. Binary logic operators.
4. Electrical implementation of logic circuits
5. Computer memory, D-Latch, Enabler, Register, Shift Register, Memory addressing
6. Computer bus, bus communication
7. Combination of logic gates, logic modules, addition module (ADD), comparison module (CMP)
8. Arithmetic and logic unit

9. Computer frequency, oscillator and timer, stepper
10. Control unit and instructions
11. Four basic types of instructions (arithmetic and logic instructions, instructions to manipulate the address of the current JMP instruction, comparison instructions, load and dump instructions)
12. Alternative architectures for general-purpose graphics processing units GPGPUs
13. Alternative architectures of user-programmable FPGA logic member arrays

Literature:

1. SCOTT, J. (2009). But how Do it Know?: The Basic Principles of Computers for Everyone. John C. Scott.
2. RAJEWSKI, J. (2017). Learning FPGAs (2017). O'Reilly Media, Inc. ISBN: 9781491965498.
3. SANDERS, J. - KANDROT, E. (2010), CUDA by Example: An Introduction to General-Purpose GPU Programming. Addison-Wesley Professional. ISBN: 9780132180160.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Student workload distribution:
50% - attendance at tutorials, preparation for revision and exam,
50% - studying literature, practicing the acquired knowledge.

Evaluation of subjects
Total number of evaluated students: 9

A	B	C	D	E	FX
44.44	33.33	22.22	0.0	0.0	0.0

Teacher: prof. András Molnár, PhD., prof. Sándor Szénási, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/OB/22	**Name:** Final thesis and its defence

Types, range and methods of educational activities:
Form of study:
Recommended extent of course (in hours):
Per week: For the study period:
Methods of study: present

Number of credits: 8

Recommended semester/trimester of study: 5., 6..

Level of study: I.

Prerequisites:

Conditions for passing the subject:
In preparing the final thesis, the student follows the instructions of his/her supervisor and the Rector's Directive regarding editing, registration, access and archiving of theses at J. Selye University. The recommended length of the bachelor thesis is 30 to 40 pages (54 000 to 72 000 characters including spaces). The deadline for the academic year is set in the academic calendar of the academic year. The originality of the thesis is evaluated in the central thesis register. The result of the originality check, a report on the originality of the thesis assessed. The originality check is a prerequisite for the defence. The submission of the thesis includes the conclusion of a licence agreement for the use of the digital reproduction of the thesis between the author and the Slovak Republic represented by the university. The final thesis shall be assessed by the thesis supervisor and a opponent, who shall draw up opinions according based on the established criteria. The thesis supervisor assesses in particular the fulfilment of the aim of the thesis, the degree of independence and initiative of the student in the elaboration of the topic, cooperation with the thesis supervisor, logical structure of the thesis, the adequacy of the methods used, the methodology, the professional level of the thesis, the depth and quality of processing of the topic, the contribution of the work, the possibility of using the results, the work with literature, the relevance of the sources used in relation to the topic and the aim of the thesis, the formal aspect of the thesis, spelling, stylistics and originality. The opponent assesses in particular the topicality and appropriateness of the topic of the thesis, the statement of the thesis and the content, the logical structure of the thesis, the continuity of the chapters, their proportionality, the appropriateness and suitability of the methods used, the methodology, the professional level of the thesis, the depth and quality of the treatment of the topic, the contribution of the thesis, the work with professional literature, the formal aspect, the spelling, the stylistics and originality. The State Examination Board will assess the originality of the thesis, the contribution of the student's work to the solution of the research problem, the student's independence, his/her ability to solve the research problem - from the search of literature sources, the determination of objectives, the choice of research methodology, the choice of the source of materials, through the implementation of the research, his ability to evaluate the results, discuss the results, summarize the results, present their significance for the educational process, etc. The ability to present the results is also evaluated, including answering questions related to the research process and the topic of the thesis, compliance with time limits, etc. The State Examination Board in a closed session will evaluate the course of the defence and decide on the award of the classification.

In the classification, it comprehensively assesses the quality of the final thesis and its defence, taking into account the assessments and the course of the defence, and shall give the defence a single overall mark.
The final grade may be the same as in the evaluations, but it may also be better or worse, in depending on the conduct of the defence.
Final grade: A - 100 - 91%, B - 90 - 81%, C - 80 - 71%, D - 70 - 61%, E - 60 - 50%.
Credit will not be awarded to a student who fails to achieve 50%.
The decision on the result of the defence will be announced publicly by the chairman of the committee together with the result of the theoretical the theoretical part of the oral part of the state examination.

Results of education:
Knowledge:
- the student knows the structure of a scientific publication,
- the student can independently and creatively use professional sources,
- the student is able to analyse and evaluate the current state of the problem in his/her field,
- the student can adequately select research procedures and apply them functionally.
Skills:
- the bachelor thesis verifies mastery of the theoretical and practical foundations of the problem.
- the student should demonstrate the ability to work with domestic and foreign literature, The student should be able to select the relevant information for his/her topic, apply his/her skills in gathering, interpretation and processing of basic professional literature,
- the student has developed the skills of independent learning, which enables him/her to pursue further study,
- the student can collect and interpret relevant data (facts) within the field of study
and make informed decisions that also take into account social, scientific and ethical aspects,
- the student will be able to justify the ideas presented as well as to articulate them in a sophisticated manner in practical conclusions and recommendations,
- the student will be able to prepare a presentation of the results of the bachelor thesis,
- the student will be able to apply the principles of scientific integrity and ethics.
Competences:
- the student will be able to demonstrate his/her professional and scientific knowledge and skills in his/her field of study,
- the student is able to argue and methodically apply knowledge in theoretical or didactic and methodological contexts,
- the student is able to implement and synthesize the acquired knowledge in practice,
- the student is able to answer the questions of the supervisor and the opponent at the required level, to successfully defend the thesis.

Brief syllabus:
1. presentation of the thesis
2. presentation of the main points of the supervisor’s and the opponent’s verdict.
3. student's answers to the supervisor's and opponent's questions.
4. a professional discussion of the thesis with questions for the student.
The student's presentation of the thesis should include, in particular, the following points:
1. A brief justification of the choice of the topic, its topicality, practical contribution.
2. Clarification of the objectives and methods used in the elaboration of the thesis.
3. The main content problems of the thesis.
4. Conclusions and practical recommendations reached by the author of the thesis.

During the presentation, the student has at his/her disposal his/her own copy of the thesis or an electronic presentation. The speech is to be delivered independently, within 10 minutes timeframe. The student may use computer technology. The thesis is available to the committee before and during the defence.

Literature:
KATUŠČÁK, D. Ako písať vysokoškolské a kvalifikačné práce. Bratislava: Enigma, 2004. Aktuálna Smernica rektora o úprave, registrácii, sprístupnení a archivácii záverečných prác na Univerzite J. Selyeho – dostupné na https://www.ujs.sk/documents/Smernica_c.2-2021o_zaverecnych_pracach_.pdf

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Undergraduate theses are supervised by the staff of the Department of Informatics. The defence of the bachelor's thesis takes place in front of an examination committee, whose members are appointed by the dean.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher:

Date of last update: 04.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KINF/OS/22	**Name:** Operating systems

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 0 / 2 **For the study period:** 13 / 0 / 26
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Interim assessment during the semester: 50% of the total assessment. During the semester a written test with maximum score of 30 points will be held. During the semester, students independently work on a semester project, for its submission and presentation a total of 20 points can be obtained. Students must obtain at least 50% of the interim assessment to be allowed to take the exam.
Exam: 50% of the total assessment. The course is finished by written exam, on which 50 points can be obtained. To successfully pass the exam, it is necessary to obtain at least 50% of the exam evaluation.
The overall assessment consists of the sum of points from the interim assessment and the final exam. To receive grade A in the course, student must obtain at least 90 points, for grade B at least 80 points, for grade C at least 70 points, for grade D at least 60 points and for grade E at least 50 points. Credits will not be given to a student who obtain less than 50 points.

Results of education:
Knowledge:
After completing the subject, the student:
• has theoretical knowledge of the operating systems,
• knows scheduling algorithms,
• knows methods for detecting and handling deadlocks.
• knows algorithms for memory management,
• knows how file systems work,
• knows the operation and management of I/O devices.
Skills:
After completing the subject, the student:
• is able to apply the acquired knowledge to solve practical tasks,
• is able to apply scheduling algorithms to solve tasks,
• is able to apply methods for handling deadlocks to solve tasks,
• is able to apply memory allocation algorithms to solve tasks,
• knows the rules of creation of documentations for practical tasks.
Competencies:
After completing the subject, the student:
• is able to work independently and efficiently,

• has an active and responsible approach to completing tasks within the subject.

Brief syllabus:

1. Introduction to the Operating Systems, basic terms.
2. History and categorization of operating systems.
3. Programming interface and user interface.
4. Process management, process states, threads.
5. Interprocess communication and synchronization.
6. CPU-scheduling, scheduling algorithms.
7. Resource management - resource distribution, resource allocation chart, deadlock.
8. Resource management - detection and handling deadlocks.
9. Operating memory management.
10. Virtual memory management, paging and segmentation.
11. Files and file systems, directory structure, permissions.
12. I/O system, peripheral devices, device interface.
13. Storage management and mass-storage structure.

Literature:

1. ADAMIS, G. – KNAPP, G.: Operációs rendszerek. Budapest : LSI Oktatóközpont, 2002, 278 s. ISBN 963 577 251 3.
2. CSERNY, L.: Mikroszámítógépek. Budapest : LSI Oktatóközpont, 2003, 330 s. ISBN 963-577-188-6.
3. KÓCZY, A. – KONDOROSI, K. et al.: Operációs rendszerek mérnöki megközelítésben. Budapest : Panem Kiadó, 2000. 180 s. ISBN 978-963-545250-0.
4. HAMBÁLKOVÁ, V.: Operačné systémy. Bratislava : Univerzita Komenského, 2015. 105 s. Dostupné na: http://www.dcs.fmph.uniba.sk/~bernat/os.ls2021/os-new.pdf
5. TANENBAUM, A. S.: Modern Operating Systems. Upper Saddle River, NJ : Pearson Prentice-Hall, 2009. 1076 s. ISBN 978-0-13-813459-4.
6. SILBERSCHATZ, A.: Operating System Concepts. New York, NY : John Wiley & Sons, 2004. 956 s. ISBN 978-0-47-125060-0.

Language, knowledge of which is necessary to complete a course:

Hungarian or Slovak

Notes:

Distribution of the student's workload:
50% of the workload - direct teaching, preparation for the test and the exam.
50% of the workload - studying the literature, work on the semester project.

Evaluation of subjects

Total number of evaluated students: 0

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

Teacher: prof. Dr. Annamária Várkonyiné Kóczy, DSc., Ing. Ondrej Takáč, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ PER/22	**Name:** Computer peripherals

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 0 / 1 **For the study period:** 13 / 0 / 13
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, there will be 2 interim evaluations in the form of a written test based on the summary of knowledge from the exercise. The condition for admission to the exam is the achievement of at least 50% point evaluation from the tests. As part of the exam, theoretical knowledge of lecture topics is tested - in written form, 100 points each. The final assessment consists of an average of 50% of the results of the tests (exercises) and 50% of the results of the written part of the theoretical written exam. To get an A grade, you need to get an average of at least 90%, to get a B grade at least 80%, for a C grade at least 70%, for a D grade at least 60% and for an E grade at least 50% . A student will not receive an assessment if he does not achieve at least a 50% average.

Results of education:
Knowledge:
After completing the subject, the student:
• knows the principle of operation of computer peripherals, optical, electronic and mechanical solutions and their physical principles,
• possesses knowledge and understanding of the classification of peripherals. Skills:
After completing the subject, the student:
• is able to apply the acquired knowledge when solving practical tasks,
• has skill in applying the possibilities of using computer peripherals,
• is able to decide on their merits and demerits when applied to solving a problem.
Competencies:
After completing the subject, the student:
• applies professional terminology and can implement acquired theoretical knowledge,
• shows independence in solving problems in the given topic.

Brief syllabus:
1. System division of peripherals. Mathematical models of input and output peripherals, matrix model.
2. Input devices; contact, indoor and capacitive keyboards, their properties and electronic solutions.
3. GM, raster principle, optical and ultrasonic mouse, piezoelectric and magnetostrictive effect.

4. Ways of sensing direction and rotation.
5. Tablets. One touch, multitouch, touch displays.
6. Scanners, additive color mixing. Stepper motor and step control.
7. Bar code readers and PLL.
8. VIDIKON camera, photoelectric effect.
9. Principle of operation and use of CCD sensors.
10. Output peripherals, 2D output.
11. Control of LCD and TFT monitors. MEMS and MOEMS projectors. CRT monitors and electronic solutions.
12. Principles of printing, matrix model, DPI. Inkjet printers, division and principles of operations. "H" bridge. Laser, LED and LCS printers. Thermal printers.
13. Writing data on magnetic, optical and magneto-optical carriers. Hard disk, GMR technology. CD-ROM, DVD, WORM (CD-W). Magneto-optical recording (MO, CD-R/W). Development trends.

Literature:

1. STOFFA, V. – CSÍZi, L. – SZŐKÖL, I. – TÓTH, K. – VÉGH, L.: Az informatika alapjai I. Selye János Egyetem, 2007. 268 s. ISBN 978-80-89234-29-5.
2. DÉSI, I. – NAGY, I.: Informatikai fogalmak kisszótára. Budapest : Korona, 2001. 248 s. ISBN 963 9376 16 7.
3. DANCSÓ, T.: Tudnivalók a számítógépről. Budapest : Nemzeti Tankönyvkiadó, 2002. 64 s.ISBN 963 19 3373 3.
4. SCHNEIDER, F.: Mi van a PC-ben = Felhasználói műszaki ismeretek. Gyula : APC-Stúdió BT., 1996. 66 s. ISBN 0008456.
5. ANTAL, P. - BÓTA, L.: Számítógépes konfigurációk. Dostupné online: https://dtk.tankonyvtar.hu/xmlui/handle/123456789/8671.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Student load distribution:
45% - participation in lessons, preparation for the exam,
55% - study of professional literature, practice of acquired knowledge.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: prof. András Molnár, PhD., prof. Sándor Szénási, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/PP/22	**Name:** Programming propaedeutics

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 0 / 2 **For the study period:** 0 / 0 / 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 2.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Students gain programming experience in the Imagine Logo microworld during the semester and create their own animations in the Logo Motion graphic environment. From the middle of the semester they independently solve the chosen programming task - semester project, the output of which is their own didactic project in Imagine.
During the semester are evaluated the tasks (small projects) submitted by the student (max. 4 points). The student can receive additional points if he continuously works on his own project (max. 2 points).
The subject ends with exam, where the final evaluation is based on the percentage of tasks completed by the student and the defense of his own project. The condition for admission to the oral exam is to achieve more than 50% of the points obtained from the programming tasks and the creation of own project.
The final evaluation of the subject is done as follows:
40% of the points from the programming task + 20% of the score for own project + 40% of the points for the oral part of own project defense.
90-100% required to achieve grade A; 80-89% for grade B; for grade C, 70-79%; 60-69% for D rating, 50-59% for E rating of the total score.

Results of education:
Knowledge:
After completing the subject, the student:
• knows the development strategies, methods and forms of students' programming knowledge within the discipline of their subject specialization;
• knows the basic principles of programming in the microworld of child-oriented programming languages;
• knows and can effectively apply the acquired programming knowledge;
• knows the basic principles of creating algorithms and knows the corresponding program structures.
Skills:
After completing the subject, the student:
• is able to analyze and solve problems using a programming language;
• is able to independently apply an algorithm to solve a specific problem;
• uses the language of the given microworld actively;

• has basic practical experience in selecting tasks;
• is able to plan and implement his own project.
Competencies:
After completing the subject, the student:
• shows a high degree of independence in creating programs (projects);
• knows how to work effectively independently;
• is characterized by creative thinking and independence;
• applies a creative IT way of thinking in his work;
• has an overview of the possibilities of teaching programming of different types and levels of schools - through child-oriented programming languages (microworlds), which enable the development of algorithmic thinking and the acquisition of programming experience in a playful form;
• has an active and responsible attitude towards the completion of subject tasks.

Brief syllabus:

1. Teaching programming at different levels and types of schools.
2. The place of child-oriented programming languages in the teaching process.
3. Turtle graphics - turtle, animated turtles.
4. Logo Motion - animation, timing, phases of turtles.
5. Basic control commands and elements of the Imagine program environment.
6. Data types - variables, text, buttons and working with them.
7. Commands to control the objects.
8. Subprograms - individual procedures.
9. Events of objects, reaction to events.
10. Conditions for managing the process.
11. Overlapping objects, testing objects
12. Multimedia possibilities of the Imagine environment.
13. Planning and implementing the own project - didactic application.

Literature:

1. CZAKÓOVÁ, K. – STOFFOVÁ, V. Kreativitás és az aktív tanulást támogató programkörnyezetek. In: Mikrovilág alkalmazások : Egyetemi tankönyv. 1. kiadás. Komárno : Univerzita J. Selyeho, 2016. s. 12-31. ISBN 978-80-8122-191-0.
2. CZAKÓOVÁ, K. Saját alkalmazás fejlesztése Imagine programkörnyezetben. In: Mikrovilág alkalmazások : Egyetemi tankönyv. 1. kiadás. Komárno : Univerzita J. Selyeho, 2016. s. 35-107. ISBN 978-80-8122-191-0STOFFOVÁ, V. – CZAKÓOVÁ, K.: Prostredie na učenie sa bádaním. In: Úvod do programovania v prostredí mikrosvetov : Vysokoškolská učebnica. Komárno : Univerzita J. Selyeho, 2016. 115 s. ISBN 978-80-8122-170-5.
3. STOFFOVÁ, V. – CZAKÓOVÁ, K.: Tvorba vlastných aplikácií v Imagine. In: Úvod do programovania v prostredí mikrosvetov : Vysokoškolská učebnica. Komárno : Univerzita J. Selyeho, 2016. 115 s. ISBN 978-80-8122-170-5.
5. STOFFA, V.: Algoritmizáció és programozás. (Algoritmizácia a programovanie) 1. kiadás, Komárom : Selye János Egyetem, Tanárképző Kar, 2005. 174 s. ISBN 80-969251-7-2.
6. TÓTH, P.: Gondolkodásfejlesztés az informatika oktatásban. Ligatura, 2004. 60 s. ISBN 9638611324xy.
7. VANKÓ, P.: Érdekes feladatok és játékok gyűjteménye mikrovilág környezetben. (Zbierka zaujímavých úloh a hier v prostredí Imagine). Komárno : Selye János Egyetem, 2010. DM.3784-PF.10.30A.6D. 43 s.
8. http://imagine.elte.hu/ [online]
9. http://imagine.infovek.sk [online]

10. http://logo.sulinet.hu/ [online]

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Student workload:
40% - participation in classes, preparation for exams,
60% - studying literature, practicing acquired knowledge, working on programming tasks, preparing semester work (project).

Evaluation of subjects
Total number of evaluated students: 3

A	B	C	D	E	FX
0.0	33.33	33.33	0.0	0.0	33.33

Teacher: PaedDr. Krisztina Czakóová, PhD., Dr. habil. Attila Elemér Kiss, CSc.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KINF/PR1/22 | **Name:** Programming 1

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 2 **For the study period:** 26 / 0 / 26
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 1.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, students must pass at least two practical examinations, which are evaluated by percentage. Each student solves assigned programming tasks independently as part of homework and continuously submits a specified number of debugged programs that are evaluated. Students' activity during the practical classes is also monitored. Active students receive a certain bonus that is added to the student's score during the semester. Students from written practical examinations as well as submitted programs must obtain a minimum of 50% evaluation to be allowed to take the exam. The teacher who leads the practical classes will prepare the assessment of the students from the individual components of the ongoing training during the semester.
The exam is combined and consists of practical programming (solving assigned tasks) and verification of theoretical knowledge from algorithmization and programming. To be classified, students must be at least 50% successful in the exam. Students are classified according to the obtained average from the overall evaluation of the continuous training during the semester and the exam. To obtain an A classification, it is necessary to obtain an average of at least 90%, to obtain a B grade at least 80%, for a C grade at least 70%, for a D grade at least 60%, for an E grade at least 50%. Credits for the subject will not be awarded to a student who does not pass at least 50% of the individual parts.

Results of education:
Knowledges:
After completing the course, the students have the necessary knowledge to create simple C programs, they know what an algorithm is, what a sequence, selection and iteration are, what a structured flowchart is made of. They know the algorithms for calculating the sum and average of array elements, the algorithm for finding the elements of an array, the algorithm for finding the maximum and minimum elements of an array and their indices, the algorithm for mirroring an array, etc. They know the necessary data types, control structures, standard libraries and their frequently used functions, the syntax and semantics of the C programming language. They can transcribe the flowchart into program code.
Skills:
After completing the subject, students can analyze and solve simpler problems, they are able to develop algorithm as a series of logical steps, express it with a structured flowchart and rewrite it into a program code. They are proficient in the chosen programming environment and have basic

programming knowledge, effectively use standard control structures and elements of the chosen programming language.
Competencies:
After completing the course, students can independently solve simple programming tasks, create algorithms and simple programs in the C programming language.

Brief syllabus:

1. Basic properties of algorithms, their creation and expression. Verbal and graphical expression of algorithms. Basic algorithmic structures and their usage.
2. Creation of algorithms and algorithmic procedures to solve various problems and tasks.
3. Compilation of source code in C language. Preprocessor. Object files. Creating an executable program.
4. Structure of the program in the C programming language. Syntax and semantics.
5. Basic data types (int, float, double, char), strings (char[]). An internal representation of the standard data types of the programming language. Variables and constants.
6. Standard libraries of the C programming language (stdio.h, math.h, stdlib.h, time.h, limits.h, etc.). Standard input and output. Standard functions, their syntax and semantics.
7. Control structures: sequence (block), selection (condition, switch) and iterations (for loop, while loop, do while loop).
8. Functions. Creating functions without parameters and with parameters. Hierarchization of the structure of the program code. Global and local variables.
9. Static one-dimensional arrays (vectors). Indexes of array elements. Basic algorithms on arrays (sum and average of elements, finding array elements, determining minimum and maximum, determining minimum and maximum indices, merging and intersecting arrays, exchanging elements, sorting array elements, etc.).
10. Pointers. Representation of pointers in computer memory. Different types of pointers in C (void*, int*, double*). Dynamic memory allocation using pointers.
11. Pointers and arrays. Dynamically created arrays.
12. Complex data types - data structure. Statically and dynamically created arrays of structures.

Literature:

1. PROKOP, J.: Algoritmy v jazyku C a C++. 3. aktualizované vyd. Praha : Grada Publishing, 2015. 200 s. ISBN 978-80-247-5467-3.
2. PERRY, G., MILLER, D.: C Programming : Absolute Beginner's Guide . 3. vyd. Harlow : Pearson Education, 2014. 337 s. ISBN 978-0-7897-5198-0.
3. IVÁNYI, A.: Informatikai algoritmusok I. 1. vyd. Budapest : ELTE Eötvös Kiadó, 2004. 816 s. ISBN 963 463 664 0.
4. IVÁNYI, A.: Informatikai algoritmusok II. 1. vyd. Budapest : ELTE Eötvös Kiadó, 2005. 750s. ISBN 963 463 775 2.
5. KNUTH, D. E.: The Art of Computer Programming Vol. 1 : Fundamental Algorithms. 3. vyd. New York : Addison-Wesley, 2015. 652 s. ISBN 978-0-201-89683-1.
6. KNUTH, D. E.: The Art of Computer Programming Vol. 3 : Sorting and Searching. 2. vyd. New York : Addison-Wesley, 2015. 782 s. ISBN 978-0-201-89685-5.
7. SPRAUL, V. A.: Think like a programmer : An Introduction to Creative Problem Solving. 1. vyd. San Francisco : No Strach Press, 2012. - 233 s. - ISBN 978-1-59327-4245.
8. STOFFA, V.: Algoritmizáció és programozás I. Komárno : Selye János Egyetem, 2005. 174 s. ISBN 80-969251-7-2.
9. STOFFA, V., CZAKÓ, K., VÉGH, L.: Programozás a gyakorlatban : Algoritmizáció és programozás II. 1. vyd. Komárno : Selye János Egyetem, 2015. 124 s. ISBN 978-80-8122-146-0.

10. SIROKI, L: C programozás kezdőknek. https://sites.google.com/site/sirokilaszlo/programozas/c-programozas-kezdoknek
11. HOROVČÁK, P., PODLUBNÝ, I.: Úvod do programovania v jazyku C. http://people.tuke.sk/igor.podlubny/C/index.htm
12. KRIVÁ, Z.: Základy programovania v jazyku C. Bratislava : STU, 2020. https://www.svf.stuba.sk/buxus/docs/dokumenty/skripta/Kriva_Z._-_ZAKLADY_PROGRAMOVANIA_V_JAZYKU_C.pdf
13. C Tutorial. https://www.tutorialspoint.com/cprogramming/index.htm
14. Learn C Programming. https://www.programiz.com/c-programming
15. VÉGH, L.: Interaktív animációk az algoritmusok és a programozás tanítására. https://anim.ide.sk/

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Students‘ load distribution:
40% - participation in classes, preparation for exams,
60% - studying literature, practicing acquired knowledge, completing programming tasks.

Evaluation of subjects
Total number of evaluated students: 8

A	B	C	D	E	FX
0.0	0.0	50.0	25.0	25.0	0.0

Teacher: prof. József Zoltán Kató, DSc., PaedDr. Ladislav Végh, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/PR2/22	**Name:** Programming 2
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 2 / 0 / 2 **For the study period:** 26 / 0 / 26 **Methods of study:** present	
Number of credits: 5	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the semester, students must pass at least two practical examinations, which are evaluated by percentage. Each student solves assigned programming tasks independently as part of homework and continuously submits a specified number of debugged programs that are evaluated. Students' activity during the practical classes is also monitored. Active students receive a certain bonus that is added to the student's score during the semester. Students from written practical examinations as well as submitted programs must obtain a minimum of 50% evaluation to be allowed to take the exam. The teacher who leads the practical classes will prepare the assessment of the students from the individual components of the ongoing training during the semester. The exam is combined and consists of practical programming (solving assigned tasks) and verification of theoretical knowledge from algorithmization and programming. To be classified, students must be at least 50% successful in the exam. Students are classified according to the obtained average from the overall evaluation of the continuous training during the semester and the exam. To obtain an A classification, it is necessary to obtain an average of at least 90%, to obtain a B grade at least 80%, for a C grade at least 70%, for a D grade at least 60%, for an E grade at least 50%. Credits for the subject will not be awarded to a student who does not pass at least 50% of the individual parts.	
Results of education: Knowledges: After completing the course, students have the knowledge needed to create more complex programs in C programming language. They know various sorting algorithms and the differences between them, basic algorithms for working with matrices and multidimensional arrays. They know various programming techniques: recursion and backtracking. They know the method of working with files and know the necessary functions for this. They have knowledge of dynamic data structures: linear lists, cyclic lists, tree structures. They know different methods of creating software products. Skills: After completing the course, students can analyze and solve more complex problems, they know how to compile a solution algorithm even for a more complex problem and rewrite the algorithm into program code in the C language. They skillfully use the chosen programming environment	

and have more advanced programming skills, the use of recursion and backtracking, the effective use of dynamic data structures and different programming methods.
Competencies:
After completing the course, students demonstrate independence in solving more complex programming problems, creating algorithms and more complex programs in the C programming language.

Brief syllabus:

1. Sorting as a suitable example for searching for an efficient algorithm: simple exchange sort, bubblesort, insertion sort, selection sort. Time computational complexity of sorting algorithms.
2. Programming technique: recursion. Solving simple recursion problems. Solving the Tower of Hanoi problem with recursion.
3. Sorting algorithms using recursion: quicksort, mergesort. Time computational complexity of sorting algorithms using recursion.
4. Two- and multidimensional fields. Basic algorithms on matrices (sum and average of elements, finding elements of a matrix, determining the minimum and maximum, determining the minimum and maximum indices, exchanging elements, sorting the matrix, working with rows and columns of the matrix, etc.). Using multidimensional arrays.
5. Programming technique: backtracking. The problem of eight queens.
6. Solving other backtracking tasks: Finding a path in a labyrinth, Moving a horse on a chessboard.
7. File as a useful tool for transferring data between programs and their environment. File structure, declaration, file type, file access, file operations. Standard functions for working with files. Methods of working with files.
8. Dynamic data types and structures: Concept of dynamic variable, their representation in computer memory. Examples of dynamic data structures: linear list, stack, queue, and their use in programming.
9. Implementation of standardized data structures (linear one-way list, linear two-way list, cyclic lists, tree structures, network structures). Using appropriate data structures to simplify problem solving.
10. Creation of software products. Top-down method, bottom-up method, functional programming, modular programming.
11. Creation of program systems. The procedure for creating a program to solve a problem: problem analysis, problem reformulation, decomposition, etc. Methods of creating program projects and their characteristics. Cooperation and management of the work of the programming team.
12. Solving complex programming problems and assignments.

Literature:

1. PROKOP, J.: Algoritmy v jazyku C a C++. 3. aktualizované vyd. Praha : Grada Publishing, 2015. 200 s. ISBN 978-80-247-5467-3.
2. PERRY, G., MILLER, D.: C Programming : Absolute Beginner's Guide . 3. vyd. Harlow : Pearson Education, 2014. 337 s. ISBN 978-0-7897-5198-0.
3. IVÁNYI, A.: Informatikai algoritmusok I. 1. vyd. Budapest : ELTE Eötvös Kiadó, 2004. 816 s. ISBN 963 463 664 0.
4. IVÁNYI, A.: Informatikai algoritmusok II. 1. vyd. Budapest : ELTE Eötvös Kiadó, 2005. 750s. ISBN 963 463 775 2.
5. KNUTH, D. E.: The Art of Computer Programming Vol. 1 : Fundamental Algorithms. 3. vyd. New York : Addison-Wesley, 2015. 652 s. ISBN 978-0-201-89683-1.
6. KNUTH, D. E.: The Art of Computer Programming Vol. 3 : Sorting and Searching. 2. vyd. New York : Addison-Wesley, 2015. 782 s. ISBN 978-0-201-89685-5.

7. SPRAUL, V. A.: Think like a programmer : An Introduction to Creative Problem Solving. 1. vyd. San Francisco : No Strach Press, 2012. - 233 s. - ISBN 978-1-59327-4245.
8. STOFFA, V.: Algoritmizáció és programozás I. Komárno : Selye János Egyetem, 2005. 174 s. ISBN 80-969251-7-2.
9. STOFFA, V., CZAKÓ, K., VÉGH, L.: Programozás a gyakorlatban : Algoritmizáció és programozás II. 1. vyd. Komárno : Selye János Egyetem, 2015. 124 s. ISBN 978-80-8122-146-0.
10. SIROKI, L: C programozás kezdőknek. https://sites.google.com/site/sirokilaszlo/programozas/c-programozas-kezdoknek
11. HOROVČÁK, P., PODLUBNÝ, I.: Úvod do programovania v jazyku C. http://people.tuke.sk/igor.podlubny/C/index.htm
12. KRIVÁ, Z.: Základy programovania v jazyku C. Bratislava : STU, 2020. https://www.svf.stuba.sk/buxus/docs/dokumenty/skripta/Kriva_Z._-_ZAKLADY_PROGRAMOVANIA_V_JAZYKU_C.pdf
13. C Tutorial. https://www.tutorialspoint.com/cprogramming/index.htm
14. Learn C Programming. https://www.programiz.com/c-programming
15. VÉGH, L.: Interaktív animációk az algoritmusok és a programozás tanítására. https://anim.ide.sk/

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Students' load distribution:
40% - participation in classes, preparation for exams,
60% - studying literature, practicing acquired knowledge, completing programming tasks.

Evaluation of subjects
Total number of evaluated students: 8

A	B	C	D	E	FX
0.0	50.0	37.5	0.0	12.5	0.0

Teacher: prof. József Zoltán Kató, DSc., PaedDr. Ladislav Végh, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/PR3/22	**Name:** Programming 3

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 0 / 2 **For the study period:** 13 / 0 / 26
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, each student must create one project (a complex application in the C# language under the Windows operating system) as part of their homework, which they must submit at the end of the semester. Each student must receive a minimum of 50% assessment in order to be allowed to take the exam. Students' activity during exercises is also monitored. Active students receive a certain bonus, which is added to the student's evaluation during the semester. The exam is combined and consists of practical programming (solving the assigned task) and verification of theoretical knowledge from object-oriented programming. In order to be classified, students must be at least 50% successful in the exam.
Students are classified according to the obtained average from the overall evaluation of the continuous training during the semester (submitted project + activity during the exercises) and the exam. To obtain an A classification, it is necessary to obtain an average of at least 90%, to obtain a B grade at least 80%, for a C grade at least 70%, for a D grade at least 60%, for an E grade at least 50% . Credits for the subject will not be awarded to a student who does not pass at least 50% of the individual parts.

Results of education:
Knowledge:
After completing the course, students have the necessary knowledge to create an application with a graphical interface in the C# language. They know the object-oriented programming paradigm, different concepts of object-oriented programming, some standard classes of the C# language. They know the method of creating a complex application with a graphical interface under the Windows operating system.
Skills:
After completing the course, students can analyze and solve more complex problems, they can create a complex application with a graphical interface in the C# language. They skillfully use the chosen programming environment and have more advanced skills in programming applications with a graphical interface under the Windows operating system.
Competencies:
After completing the course, students demonstrate independence in solving more complex programming tasks, creating complex applications with a graphical interface under the Windows operating system in the C# programming language.

Brief syllabus:

1. Programming under the Windows operating system, overview of programming languages, visual, event-driven programming.
2. Programming in the C# language. Overview of C# data types and structures. Value data types (struct) and reference data types (class). Converting data, using the Convert static class. Basic C# components and events (Label, Button, TextBox, CheckBox, RadioButton, ListBox, etc.), component properties and events.
3. Object-oriented programming (OOP). Encapsulation, polymorphism, inheritance, class and object. Data (attributes) and methods. Constructor. Access to data and methods, visibility modifiers (public, private, protected).
4. Inheritance, polymorphism. Static and dynamic type, static and dynamic binding (early binding, late binding). Class hierarchy, object in C#. Compatibility and class conversion.
5. Overloaded methods, overloaded constructor. Examples of their use in C#.
6. Abstract class, abstract methods. Examples of using abstract classes.
7. Static classes, static methods and static data. Examples of using static classes.
8. Standard dialog boxes and their use in C# (ColorDialog, FontDialog, OpenFileDialog, SaveFileDialog).
9. Working with files. Streams in C#, classes Stream, BufferedStream, and FileStream. Reading and writing text files in C#, using methods File.ReadAllText, File.WriteAllText, and classes StreamReader, StreamWriter.
10. Graphics, drawing. Paint Event and Invalidate Method in C#. Classes and structures used in drawing: to define coordinates (Point, Rectangle), line and fill color (Pen, SolidBrush), drawing using methods of the Graphics class (DrawLine, DrawImage, DrawRectangle, FillRectangle, DrawEllipse, FillEllipse).
11. Comparison of usability of structure (struct) and class (class) in C# language. Defining and using the enumeration type (enum), creating and using interfaces (interface).
12. Genericity (generics) and generic collections in the C# language: classes List, LinkedList, Dictionary, SortedList, HashSet, SortedSet, Queue, Stack.
13. Exceptions, exception classes in C# (Exception, FormatException, IOException, FileNotFoundException). Handling exceptions with the try-catch-finally command, creating exceptions with the throw keyword. Defining and using custom exception classes.

Literature:

1. ANDERSON, T.: C# in Easy Steps. 1. vyd. Southam : Computer Step, 2004. 192 s. ISBN 1-84078-150-5.
2. HANÁK, J.: C# praktické príklady. 1. vyd. 290 s. ISBN 80-247-0988-0.
3. ARCHER, T.: Myslíme v jazyku C# = Knihovna programátora. 2. vyd. Praha : Grada Publishing, 2002. 308 s. ISBN 80-247-0301-7.
4. PETZOLD, CH.: Programování Microsoft Windows v jazyce C#. 1. vyd. Praha : SoftPress, 2003. 600 s. ISBN 80-86497-54-2.
5. KOTSIS, D., SZÉNÁSI, S.: Többnyelvű programozástechnika : Object Pascal, C++, C#, Java. 1. vyd. Budapest : Panem Könyvkiadó Kft., 2007. 580 s. ISBN 978 9 635454 72 3.
6. ILLÉS, Z. Programozás C# nyelven. Budapest, 2005. http://compalg.inf.elte.hu/~tony/Informatikai-Konyvtar/09-Programozas%20C-sharp%20nyelven/Programozas-Csharp-nyelven-Konyv.pdf.
7. KOVÁCS, E., RADVÁNYI, T., KIRÁLY, R., HERNYÁK, Z.: C# feladatgyűjtemény. 2011. https://dtk.tankonyvtar.hu/xmlui/bitstream/handle/123456789/8447/0046_csharp_feladatgyujtemeny.pdf.
8. C# Tutorial. https://www.tutorialspoint.com/csharp/index.htm.

9. C# Tutorials. https://www.tutorialsteacher.com/csharp.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Students' load distribution:
40% - participation in lessons, preparation for the exam,
60% - study of professional literature, practice of acquired knowledge, work on programming tasks, preparation of semester work.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: prof. Sándor Szénási, PhD., PaedDr. Ladislav Végh, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KINF/PR4/22 | **Name:** Programming 4

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 0 / 2 **For the study period:** 0 / 0 / 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 4.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, students have to pass three written tests on the main topics, which are evaluated by percentage. Students should prepare for the examinations at home by solving practical assignments. Students must obtain a minimum of 50% in each written examination to be allowed to take the exam. The overall evaluation of the continuous training of each student is calculated from the averages of three written examinations.
The exam consists of practical programming (solving the given task). In order to be classified, students must be at least 50% successful in the exam.
Students are classified according to the obtained average from the overall evaluation of the continuous training during the semester and the exam. To obtain an A classification, it is necessary to obtain an average of at least 90%, to obtain a B grade at least 80%, for a C grade at least 70%, for a D grade at least 60%, for an E grade at least 50% . Credits for the subject will not be awarded to a student who does not pass at least 50% of the individual parts.

Results of education:
Knowledge:
After completing the course, students have knowledge of object-oriented programming, they have knowledge of creating programs in the Java language. They know what generic types are and know the generic collections of the Java language.
Skills:
After completing the course, students can create and use classes and objects, use interfaces, events, generic types in Java. They skillfully use the chosen programming environment and have skills in programming in the Java language, effective use of generic collections of the Java language.
Competences:
After completing the subject, students demonstrate independence in solving complex programming tasks, creating object-oriented programming code in Java.

Brief syllabus:
1. Basics of the Java programming language: data types, control structures, syntax and semantics of the language. Getting to know the development environment.
2. Using strings, using single and multidimensional arrays in Java, using the Random class to generate random numbers.

3. Solving simpler assignments to practice programming in the Java language.
4. Classes and objects, attributes and methods, constructor, visibility modifiers in Java.
5. Theory of class inheritance, its use, inheritance in the Java language.
6. Exceptions, Use of Exceptions in Java.
7. Interfaces, creating and using interfaces.
8. Polymorphism in the Java language.
9. Java Stream I/O. Working with files.
10. Generic types, creation and use of generic classes.
11. Java Collections, possibilities of their use.
12. Solving complex programming tasks in the Java language.

Literature:

1. CADENHEAD, R.: Tanuljuk meg a java programozási nyelvet 24 óra alatt. 1. vyd. Budapest : Kispapu, 2006. 527 s. ISBN 963 963707 6.
2. BURD, B.: Java. 2. vyd. Budapest : Panem Könyvek, 2017. - 503 s. - ISBN 978-615-5186-52-3.
3. KOTSIS D., SZÉNÁSI S.: Többnyelvű programozástechnika : Object Pascal, C++, C#, Java. 1. vyd. Budapest : Panem Könyvkiadó Kft., 2007. 580 s. ISBN 978 9 635454.
4. MCGRATH, M.: JAVA. 5. vyd. Leamington : In Easy Steps, 2014. 192 s. ISBN 978-1-84078-621-7.
5. SZÉNÁSI, S.: Java programozási nyelv oktatása C# alapokon. Informatika a felsőoktatásban 2008, Debrecen, Magyarország, 2008, pp. 1-7.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Students' load distribution:
50% - participation in lessons, preparation for and exams,
50% - study of professional literature, practice of acquired knowledge, work on programming tasks, preparation of semester work.

Evaluation of subjects
Total number of evaluated students: 1

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

Teacher: prof. Sándor Szénási, PhD., PaedDr. Ladislav Végh, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/PS/22	**Name:** Computer networks

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 1 **For the study period:** 26 / 0 / 13
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 6.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The course is completed by a written examination, for which students can obtain 50% of the total number of points. During the semester, students will take two written examinations for which they may earn 50% of the total points.
In addition to contact teaching, students prepare for practicals, prepare for written quizzes, and prepare for the exam.
A minimum of 90 points is required for a grade of A, a minimum of 80 points for a grade of B, a minimum of 70 points for a grade of C, a minimum of 60 points for a grade of D, and a minimum of 50 points for a grade of E. Credit will not be awarded to a student who scores less than 50 points.

Results of education:
Knowledge:
Upon completion of the course, the student will:
- has theoretical knowledge of computer networks,
- The student has a good knowledge of network models and transmission technologies,
- knows the individual network competences,
- Knows basic network protocols and addressing.

Skills:
Upon completion of the course, the student will:
- Is able to design and implement a local area network including configuration,
- is able to combine different network components and standards,
- is able to independently implement network protocols.

Competencies:
Upon completion of the course the student will:
- can work effectively and implement the acquired theoretical knowledge,
- shows independence in solving more complex problems.

Brief syllabus:
1. Concept of network, basic parts of a network.
2. Reasons for the introduction of computer networks and the resulting basic network services.
3. Basic types of computer networks (typology, topology, architecture).
4. LANs, (MAN, WAN).

5. Basic components of computer networks.
6. Internet, origin and development.
7. Methods of access.
8. Network transmission technologies.
9. ISO-OSI model.
10. TCP/IP protocol.
11. Internet applications and protocols.
12. IP address theory, domain addresses, content creation.
13. Basics of security in computer networks.

Literature:

1. ROUBEL, P.: Hardware pro úplné začátečníky. Brno : Computer Press, 2003. ISBN 8072267302
2. SOSINKY, B.: Počítačové sítě : Vše, co potřebujete vědět o správě sítí. Brno : Computer Press, 2010. ISBN 978-80-251-3363-7
3. STOFFOVÁ, V.: Az informatika alapjai II - A számítógépes hálózatok. (Základy informatiky II – Počítačové siete.). 1. vyd. Komárno : Univerzita J. Selyeho, 2010, s. 140. ISBN 978-80-89234
4. CSIZMADIA, J.: Számítógépes hálózatok architektúrája - Elektronikus tankönyv. Komárno. Selye János Egyetem, 2009.
5. GYÁNYI, S.: Informatika 2. Óbudai Egyetem. 2014. http://dtk.tankonyvtar.hu/xmlui/handle/123456789/12567.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Student workload distribution:
50% - attendance at tutorials, preparation for examinations and exams,
50% - studying literature, practicing the acquired knowledge.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Dr. habil. Dr. Gábor Kiss, PhD., Ing. Ondrej Takáč, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ ROB1/22	**Name:** Robotics
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 0 / 2 **For the study period:** 0 / 0 / 26 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 6.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the semester, students pass two written examinations, for which they can receive 100% of the total number of points. In addition to contact teaching, students prepare for exercises, prepare for written examinations and the exam. It is necessary to get at least 90% of points for A rating, at least 80% of points for B rating, at least 70% of points for C rating, at least 60% of points for D rating and at least 50% of points for E rating. Credits will not be granted to a student who has not collected 50% of points at the end of the semester.	
Results of education: Knowledge: Upon completion of the course, the student will: - knows the professional terminology, - knows the basic principles of mobile and stationary robots, - knows the principles of navigation of mobile robots, - knows the principles of positioning systems, - knows the individual functional and structural parts of robots, - has a deeper knowledge of autonomous systems and their use in a wide range of applications. Skills: Upon completion of the course, the student will: - Can design mobile or stationary robotic systems, - can design and implement multisensor systems, - can mathematically evaluate navigation signals, - can analyze and solve basic problems of stationary or mobile robots, - Can navigate robotic systems and use them in specific applications. Competencies: Upon completion of the course, the student will: - Can work efficiently and implement the acquired theoretical knowledge, - has an active and responsible approach to completing tasks, - shows independence in solving more complex problems.	

Brief syllabus:

1. Introduction to robotic systems, platform stability solutions, CLAWAR machines.
2. Mobile robots - wheeled, tracked and biologically inspired systems.
3. Stationary robots - manipulation systems, relative positioning, transformations.
4. Visual positioning systems - properties, principle of operation, use.
5. Possibilities of precise positioning of robotic systems.
6. Use of neural networks and interpolation systems in positioning.
7. General principles of navigation of mobile robots, processing of navigation variables of external sensors.
8. Autonomous robotic systems and their interactive interaction with the environment.
9. Sensory system of autonomous robots, multisensory approach.
10. Computer vision – laser, camera, infrared and ultrasound principles, based mainly on trigonometric principles.
11. Basic problems of mobile robotics – navigation in known and unknown environments.
12. Planning the route of the mobile robot, creating maps, avoiding obstacles.
13. Cooperation of mobile robots using centralized and distributed control.

Literature:

1. STUART, R. - NORVIG, P.: Mesterséges intelligencia modern megközelítésben Budapest :
2. Panem Könyvkiadó, 2005. 1206 s. ISBN 963 545 411 2.
3. KULCSÁR, B.: Robottechnika LSI Oktatóközpont, 2003. 394 s. ISBN 963 577 243 2.
4. CSEREY, G. – ISTENES, Z.: Autonom Mobil Robotok. Budapest: Eötvös Loránd Tudományegyetem, 2019. ISBN 978-963-284-467-1. http://dtk.tankonyvtar.hu/xmlui/handle/123456789/3722
5. MESTER, G.: Robotika. Szeged. Szegedi Tudományegyetem, 2011. ISBN 978-963-279-515-7. http://dtk.tankonyvtar.hu/xmlui/handle/123456789/7525
6. PIGLERNÉ, L. R. – STARKNÉ, W. A.: Ágens-technológia. Pannon Egyetem, 2011. http://dtk.tankonyvtar.hu/xmlui/handle/123456789/7529
7. LACZIK, B.: Robottechnika. EDUTUS Főiskola, 2012. http://dtk.tankonyvtar.hu/xmlui/handle/123456789/11920
8. SZABÓ, Z. – BUDAI, C. – KOVÁCS, L. – LIPOPVSKI, G.: Robotmechanizmusok. BME, 2014. http://dtk.tankonyvtar.hu/xmlui/handle/123456789/3421

Language, knowledge of which is necessary to complete a course:

Hungarian or Slovak

Notes:

Student workload distribution:
60% - participation in tutorials, preparation for examinations,
40% - studying literature, practicing the acquired knowledge, working on programming tasks.

Evaluation of subjects

Total number of evaluated students: 0

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

Teacher: prof. András Molnár, PhD., Ing. Ondrej Takáč, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ SMP/22	**Name:** Social, moral and legal context of computer systems development
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 0 / 2 **For the study period:** 0 / 0 / 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the semester, students will complete two written quizzes for which they may earn 100% of the total points. For assessment A should be obtained at least 90 points, for assessment B at least 80 points, for assessment C at least 70 points, for assessment D at least 60 points, for assessment E at least 50 points. Credits for the subject will not be awarded to a student who does not obtain at least 50 points.	
Results of education: Educational outcomes - knowledges: Upon successful completion of the course, the student: - will be aware of the social, moral, legal and economic contexts of his/her profession, - acquire a basic knowledge of the methods and means of ensuring safety on Internet security, and acquire basic knowledge in selected areas of law application, - gain knowledge of the understanding of ICT and the information revolution. Educational outcomes - skills: Upon successful completion of the course, the student: - can use selected legal norms, - can use the Internet and means of communication in accordance with the protection of personal data, with the protection of business privacy and general security, - can use electronic signature. Educational outcomes - competencies: Upon successful completion of the course, the student will be able to make independent and correct decisions and act in specific ethical and cybercrime situations.	
Brief syllabus: 1. Legal protection of computer software 2. Copyright protection of computer programs 3. Social context of informatics and information and communication technologies 4. Information and communications technology law 5. Software piracy 6. Cybercrime 7. Legal regulations for e-commerce in Slovakia 8. Electronic signature 9. Internet safety 10. Legal issues and the internet in Slovakia	

11. Domain name registration
12. General Data Protection Regulation
13. Cross-border flow of personal data

Literature:

1. CRUME, J.: Az internetes biztonság belülről : Amit a hekkerek titkolnak. Addison-Wesley, 2003. 302 s. ISBN 9639131512.
2. CHLIPALA, M. a kol.: Právo informačných a komunikačných technológií. Slovenská technická univerzita, 2005. 186 s. ISBN 9788022721950.
3. HANCE, O. - SISÁK, G.: Üzlet és jog az interneten. Budapest : Panem, 1997. 410 s. ISBN 963545127x.
4. KYAS, O. - INOTAI, L.: Számítógépes hálózatok biztonságtechnikája. Budapest : Kossuth, 2000. 312 s. ISBN 9630941538.
5. MAISNER, M. a kol.: Základy práva informačných technológií. IURA EDITION, 2013. 320 s. ISBN 9788080785949.
6. MAISNER, M.: Základy softwarového práva. Wolters Kluwer, 2011. 356 s. ISBN 978-80-7357-638-7.
7. POLČÁK, R.: Internet a proměny práva, Vydavateľstvo: Auditorium, 2012. 388 s. ISBN 978-80-87284-22-3.
8. POLČÁK, M. Právo na internetu, Spam a odpovědnost ISP. Computer Press, 2007. 150 s. ISBN 8025117774.
9. RHEE, Y. M.: Internet Security. Wiley, 2003. 408 s. ISBN 0470852852.
10. Andrew M. St. Laurent (2004) Understanding Open Source and Free Software Licensing. O'Reilly Media, Inc. ISBN: 9780596005818.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Student workload distribution:
60% - participation in tutorials, preparation for examinations,
40% - studying literature, practicing the acquired knowledge.

Evaluation of subjects
Total number of evaluated students: 7

A	B	C	D	E	FX
0.0	0.0	28.57	14.29	57.14	0.0

Teacher: László Marák, PhD., doc. RNDr. József Bukor, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/SPZ-B/22	**Name:** Study abroad
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The prerequisite for the course is a long-term stay abroad at a foreign university/partner institution.	
Results of education: Graduates of the course are eligible for a long-term study stay at a foreign university/partner institution.	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course: hungarian, slovak	
Notes: Credits are awarded to the student only after the contract has been signed. They are awarded in the semester(s) to which the student has contractually committed.	
Evaluation of subjects Total number of evaluated students: 1	

a	n
100.0	0.0

Teacher:
Date of last update: 04.03.2022
Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ TAP/22	**Name:** Educational software development
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 0 / 2 **For the study period:** 0 / 0 / 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the semester, students create their own applications (projects), under the guidance of the teacher. They are continuously checked and scored in their creative work as they progress with their project. The subject ends with an exam. Students must obtain at least 50% of the interim assessment (creation of own project) to be allowed to take the exam. Students are classified according to the obtained average from the overall evaluation of the interim assessment (work on the project) during the semester (50%) and the assessment of the final project (50%), which they must present in the exam. To receive grade A in the course, student must obtain at least 90%, for grade B at least 80%, for grade C at least 70%, for grade D at least 60% and for grade E at least 50%.	
Results of education: Knowledge: After completing the subject, the student: • knows strategies, methods and forms of creating applications; • knows the principles of program creation in programming languages; • knows and knows how to effectively apply the acquired programming knowledge during the development of own pedagogical applications; • knows the basic principles of creating algorithms and program structures. Skills: After completing the subject, the student: • is able to analyze and solve problems using a programming language; • is able to independently apply an algorithm to solve a given problem; • is able to controls programming actively in a given programming environment, or can integrate more environments to achieve the set goal; • is able to design and implement own project; • is capable of independent creation of presentations of teaching material, creation of e-learning courses in various environments; • is able to create applications for interactive whiteboards useable in the pedagogical process. Competencies: After completing the subject, the student: • has a high degree of independence in creation of applications (projects);	

• has an overview of the possibilities of individual tools and environments for application development;
• knows how to work effectively and independently;
• is characterized by creative thinking and independence;
• applies a creative computational thinking in his or her work;
• has an overview of the possibilities of programming and development environments for creation own applications;
• has an active programming experience;
• has an active and responsible approach to completing tasks within the subject.

Brief syllabus:

1. Possibilities of the computer as a didactic tool in individual forms and phases of teaching.
2. Presenting the learning material in different environments, choosing the topic of own application.
3. Design and implementation of own project (application).
4. Pedagogical transformation and clarity.
5. Ensuring dynamism and interactivity.
6. Creation of feedbacks in didactic applications.
7. Creation of database test systems.
8. Test creation algorithms, selection criteria.
9. Possibilities of creating an animation in different environments.
10. Possibilities of creating an interactive user interface in different environments.
11. Multimedia possibilities of individual tools and environments.
12. Possibilities of the interactive whiteboard to apply the use of the application.
13. Testing and Debugging.

Literature:

1. CZAKÓOVÁ, K. – STOFFOVÁ, V. Kreativitás és az aktív tanulást támogató programkörnyezetek. In: Mikrovilág alkalmazások : Egyetemi tankönyv. 1. kiadás. Komárno : Univerzita J. Selyeho, 2016. s. 12-31. ISBN 978-80-8122-191-0.
2. CZAKÓOVÁ, K. Saját alkalmazás fejlesztése Imagine programkörnyezetben. In: Mikrovilág alkalmazások : Egyetemi tankönyv. 1. kiadás. Komárno : Univerzita J. Selyeho, 2016. s. 35-107. ISBN 978-80-8122-191-0.
3. STOFFOVÁ, V. – CZAKÓOVÁ, K.: Prostredie na učenie sa bádaním. In: Úvod do programovania v prostredí mikrosvetov : Vysokoškolská učebnica. Komárno : Univerzita J. Selyeho, 2016. 115 s. ISBN 978-80-8122-170-5.
4. (ACD) STOFFOVÁ, V. – CZAKÓOVÁ, K.: Tvorba vlastných aplikácií v Imagine. In: Úvod do programovania v prostredí mikrosvetov : Vysokoškolská učebnica. Komárno : Univerzita J. Selyeho, 2016. 115 s. ISBN 978-80-8122-170-5.
5. STOFFOVÁ, VERONIKA: POČÍTAČ – UNIVERZÁLNY DIDAKTICKÝ PROSTRIEDOK. 1. vyd., Fakulta prírodných vied UKF, Nitra, 2004. ISBN 80-8050-765-1.
6. MOODLE: MOODLE DOCS 2.8 [online]. 2014. Dostupné na adrese: <https://docs.moodle.org/28/en/Main_page>.
Odborné články:
CZAKÓOVÁ, K.: Developing algorithmic thinking by educational computer games. In. Proceedings of the 16th International Scientific Conference: “eLearning and Software for Education : eLearning sustainment for never-ending learning. Volume 1, DOI: 10.12753/2066-026X-20-003, 2020/1, p. 26-33. Bucharest : “CAROL I” National Defence University Editura, Universitara, 2020. ISSN 2066-026X, ISSN-L 2066-026X, ISSN CD 2343 – 7669. (Scopus)

CZAKÓOVÁ, K. Mathematical Model Based Interactive Simulations In Education. In. ICERI 2019 Proceedings of the 12th International Conference of Education, Research and Innovation : Enlightening Minds through Education. DOI: 10.21125/iceri.2019.2479, p. 10120-10125, Seville : IATED Academy, 2019. ISBN 978-84-09-14755-7. ISSN 2340-1095. (WOS)
CZAKÓOVÁ, K.: Interaktív modellek és szimulációk az oktatásban. In. XXXII. Didmattech 2019 - Proceedings – New Methods and Technologies in Education and Practice : III New Methods and Tools in Education. Trnava : Trnavská univerzita v Trnave, 2019. ISBN (on line) 978 80 568 0398 1.
CZAKÓOVÁ, K.: Microworld environment of small language as „living laboratory" for developing educational games and applications. In. Proceedings of the 13th International Scientific Conference „eLearning and Software for Education" : Could technology support learning efficiency? Volume 1, DOI: 10.12753/2066-026X-17-042, 2017/1, p. 286-291. Bucharest : "CAROL I" National Defence University Publishing House, 2017. ISSN 2066-026X ISSN-L, 2066-026X, ISSN CD 2343 – 7669.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Distribution of the student's workload:
40% of the workload - direct teaching, preparation for the exam.
60% of the workload - studying the literature, work on the semester project.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: prof. Sándor Szénási, PhD., RNDr. Štefan Gubo, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KINF/TFJ/22 | **Name:** Formal languages and automata

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 2 / 0 **For the study period:** 13 / 26 / 0
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 4.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Interim assessment during the semester: 50% of the total assessment. During the semester two written tests with maximum score of 15 points per test will be held. During the semester, students independently work on 2 practical assignments (1 from the part of regular languages and finite automata, and 1 from the part of context-free languages and pushdown automata), for their submission a total of 20 points can be obtained. Students must obtain at least 50% of the interim assessment to be allowed to take the exam.
Exam: 50% of the total assessment. The course is finished by written exam, on which 50 points can be obtained. To successfully pass the exam, it is necessary to obtain at least 50% of the exam evaluation.
The overall assessment consists of the sum of points from the interim assessment and the final exam. To receive grade A in the course, student must obtain at least 90 points, for grade B at least 80 points, for grade C at least 70 points, for grade D at least 60 points and for grade E at least 50 points. Credits will not be given to a student who obtain less than 50 points.

Results of education:
Knowledge:
After completing the subject, the student:
• has theoretical knowledge of the theory of formal languages and automata.
Skills:
After completing the subject, the student:
• is able to construct regular grammars, finite automata and regular expressions,
• is able to construct context-free grammars and pushdown automata,
• is able to prove about given languages that they are not regular or context free,
• knows the rules of creation of documentations for practical tasks.
Competencies:
After completing the subject, the student:
• is able to work independently and efficiently,
• has an active and responsible approach to completing tasks within the subject.

Brief syllabus:
1. Introduction to the Theory of Formal Languages and Automata, basic terms and definitions.
2. Chomsky hierarchy of languages, Chomsky hierarchy of grammars.

3. Regular languages – basic terms.
4. Nondeterministic and deterministic finite automata.
5. Connection between nondeterministic and deterministic finite automata
6. Connection between regular grammars and finite automata.
7. Regular expressions.
8. Pumping lemma for regular languages.
9. Context-free languages – basic terms.
10. Pushdown automata.
11. Connection between context-free grammars and pushdown automata.
12. Pumping lemma for context-free languages.
13. Top-down parsing, bottom-up parsing.

Literature:

1. GUBO, Š.: Formális nyelvek és automaták. Komárno : Univerzita J. Selyeho, 2015, 131 s. ISBN 978-80-8122-148-4.
2. FÜLÖP, Z.: Formális nyelvek és szintaktikus elemzésük. Szeged : Polygon, 1999, 124 s. ISSN 1417-0590.
3. BACH, I.: Formális nyelvek. Budapest : Typotex, 2005, 227 s. ISBN 978-963-9132-92-4.
4. ROVAN, B. - FORIŠEK, M.: Formálne jazyky a automaty. Bratislava : Univerzita Komenského, 2013. 125 s. Dostupné na: http://foja.dcs.fmph.uniba.sk/materialy/skripta.pdf
5. SINGH, A.: Elements of Computation Theory. London : Springer-Verlag, 2009. 422 s. ISBN 978-1-84882-496-6.
6. HOPCROFT, J. E. – MOTWANI, R. – ULLMAN, J. D.: Introduction to Automata Theory : Languages, and Computation. London : Pearson, 2014. 488 s. ISBN 978-1-292-03905-3.
7. HORVÁTH, G. – NAGY, B.: Formal Languages and Automata Theory. Budapest : Typotex, 2014, 135 s. ISBN 978-963-2793-44-3.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Distribution of the student's workload:
50% of the workload - direct teaching, preparation for the tests and the exam.
50% of the workload - studying the literature, practicing the acquired knowledge, work on practical assignments.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: prof. RNDr. Tibor Kmeť, CSc., RNDr. Štefan Gubo, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ TMA/22	**Name:** Multimedia application development
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 0 / 2 **For the study period:** 0 / 0 / 26 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 6.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the semester, students solve practical problems for which they can get 60 points. At the end of the semester, students will complete a term project for which they may receive 40 points. A grade of A requires at least 90% points, a grade of B requires at least 80% points, a grade of C requires at least 70% points, a grade of D requires at least 60% points, and a grade of E requires at least 50% points. Credit will not be awarded to a student who has not earned 50% of the points at the end of the semester.	
Results of education: Knowledge: After completing the course, the student will be familiar with the SVG format. The student knows how to create and modify an SVG image using program code or a vector graphics editor. The student knows the possibilities of animating, interacting, and attaching sound to vector images. Skills: Upon completion of this course, students will have basic knowledge and skills in vector image (graphical object) creation and simple animations in an SVG/JavaScript or SVG/ JQuery environment. Upon completion of the course, students are able to independently create illustrations and simple animations that can be easily integrated into web pages using HTML. Competencies: Upon completion of the course, students have the ability to create vector-based audiovisual interactive web applications. The student can use his/her skills as a web developer, as a full-stack developer, as a web game developer, or as a web animator. The student can also use his/her skills as a developer of a system for visualizing information, for creating graphs, charts, infographics, and for visually representing information.	
Brief syllabus: 1. Basics of vector representation. SVG format. Basic objects supported in SVG format, lines, segments, circles, ellipses, rectangles, spline-y. 2. Object attributes such as color, transparency, frame, position, orientation. 3. Grouping of objects. 4. Software for creating SVG images, integration and display of SVG images in web pages. 5. Creating simple SVG images.	

6. Vectorization (framing of images).
7. Basic image animation, panning and rotation.
8. Advanced animation using external libraries, acceleration, deceleration, vibration, jumping.
9. Morphing images.
10. Creating charts.
11. Interactivity in SVG.
12. Complex interaction with an image.
13. Connecting sound to animation.

Literature:

1. EISENBERG, J. D.: Amelia Bellamy-Royds (2014), SVG Essentials, 2nd Edition. O'Reilly Media, Inc. ISBN: 9781449374358
2. MACRAE, C (2013). Learning from jQuery. O'Reilly Media, Inc. ISBN: 9781449335199
3. BAH, T.: (2011). Inkscape: Guide to a Vector Drawing Program, 4th Edition. Pearson.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Student workload distribution:
55% - participation in classes, preparation for exercises,
45% - studying literature, practicing the acquired knowledge, working on practical assignments, preparing the term paper.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Dr. habil. Attila Elemér Kiss, CSc., László Marák, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KINF/TPS/22	**Name:** Pedagogical software creation

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 0 / 2 **For the study period:** 0 / 0 / 26
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 6.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester students independently solve a designated programming task - semester project, the output of which is their own pedagogical software. Students also have the opportunity to consult their project during the semester (its specific development phase) with the teacher. The students' work on the project is continuously monitored and scored. The completed pedagogical software will be handed over at the end of the semester (electronically and with instructions for use).
The subject ends with exam. The condition for admission to the exam is that the score obtained from the continuous evaluation of the preparation of the student's own project (pedagogical software) reaches at least 50% of the possible points. Students are evaluated on the basis of the average obtained from the evaluation of the work (project work) during the semester (50%) and the level of the final work (project) (50%). They must defend the project during the exam.
An average of at least 90% is required to achieve grade A, at least 80% for grade B, at least 70% for grade C, at least 60% for grade D, and at least 50% for grade E.

Results of education:
Knowledge:
After completing the subject, the student:
• knows the strategies, methods and forms of pedagogical software development;
• is aware of the possibilities of the computer in the individual teaching forms and phases;
• knows the basic principles of program creation in programming languages;
• knows the basic principles of creating algorithms and program structures for controlling;
• knows and can effectively apply the acquired programming knowledge to create own pedagogical software;
• knows the pedagogical and psychological aspects of pedagogical software creation.
Skills:
After completing the subject, the student:
• can analyze problems and solve them using a programming language;
• can choose the right algorithm to solve the problem;
• can actively write program in a specific programming environment or can integrate several environments to achieve the set goal;
• is able to select and skillfully use the appropriate programming environment (or even combine different environments) for the creation of pedagogical software on a given topic;

• is able to plan and implement his own project;
• knows the basics of pedagogical software creation;
• is aware of the rules for preparing the correct documentation of software products;
• is able to independently prepare the presentations of the course material;
• can use and apply the created software in the pedagogical process.
Competencies:
After completing the subject, the student:
• demonstrates a high degree of independence in creating the software (project);
• has an overview of the possibilities of individual tools and environments required for the creation of pedagogical software;
• knows how to work effectively independently;
• is characterized by creative thinking and independence;
• applies a creative IT way of thinking in his work;
• has an overview of the possibilities of programming and development environments for creating own software;
• is characterized by active programming experience;
• has an active and responsible attitude towards the completion of subject tasks.

Brief syllabus:

1. Possibilities of using the computer in certain forms and phases of teaching.
2. Presentation of learning material - knowledge related to computer use.
3. Pedagogical and psychological aspects of pedagogical software creation.
4. Classification of pedagogical software according to different aspects.
5. Selection of the topic of the pedagogical software, project planning.
6. Implementation of pedagogical software.
7. Computer knowledge testing.
8. Possibilities for making animations in different programming languages.
9. Possibilities of creating an interactive user interface.
10. Possibilities of multimedia in the learning process.
11. Software testing and fine-tuning.
12. Rules for creating documentation for software products.
13. Testing of final products in real conditions.

Literature:

1. ANGSTER, E.: Az objektumorientált tervezés és programozás alapjai. Budapest : Akadémiai, 2000. 312 s.ISBN 9636508186.
2. CHAPMAN, N. - CHAPMAN, J.: Digitel multimedia: Second Edition, 2003. 700 s. ISBN 0470858907.
3. CZAKÓOVÁ, K. – STOFFOVÁ, V. Kreativitás és az aktív tanulást támogató programkörnyezetek. In: Mikrovilág alkalmazások : Egyetemi tankönyv. 1. kiadás. Komárno : Univerzita J. Selyeho, 2016. s. 12-31. ISBN 978-80-8122-191-0.
4. CZAKÓOVÁ, K. Saját alkalmazás fejlesztése Imagine programkörnyezetben. In: Mikrovilág alkalmazások : Egyetemi tankönyv. 1. kiadás. Komárno : Univerzita J. Selyeho, 2016. s. 35-107. ISBN 978-80-8122-191-0.
5. KADLEC, V.: Učíme se programovat v Delphi a jazyce OBJECT PASCAL. Brno : Computer Press, 2002. 290 s. ISBN 8072262459.
6. MCCARTHY, J.: Softwarové projekty. 1. vyd. Praha : Computer Press, 1999. 190 s. ISBN 80-7226-164-0.
7. MCCARTHY, J.: Softwarové projekty. Brno : Computer Press, 1999. 190 s. ISBN 8072261940.

8. STOECKER, M.: Developing Wisndows-Based Applicatoins with Microsft. Microsoft .net, 2003. 600 s. ISBN 0735619263.
9. STOFFOVÁ, V. – CZAKÓOVÁ, K.: Prostredie na učenie sa bádaním. In: Úvod do programovania v prostredí mikrosvetov : Vysokoškolská učebnica. Komárno : Univerzita J. Selyeho, 2016. 115 s. ISBN 978-80-8122-170-5.
10. STOFFOVÁ, V. – CZAKÓOVÁ, K.: Tvorba vlastných aplikácií v Imagine. In: Úvod do programovania v prostredí mikrosvetov : Vysokoškolská učebnica. Komárno : Univerzita J. Selyeho, 2016. 115 s. ISBN 978-80-8122-170-5.
11. SZIRMAY-KALOS, L. - LÁSZLÓ, Z. – KONDOROSI, K.: Objektum-orientált szoftverfejlesztés. Budapest : ComputerBooks, 2001. 427 s. ISBN 963 618 108 X.
12. SZIRMAY-KALOS, L. Háromdimenziós grafika, animáció és játékfejlesztés. Budapest : ComputerBooks, 2004. 486 s. ISBN 9636183031.
13. VÁMOSSY, Z.: Delphi a gyakorlatban. Bicske : Szak, 2002. 132 s. ISBN 963 9131 22 9.
14. VÉG, Cs.: Alkalmazásfejlesztés : a Unified Modeling Language szabványos jelöléseivel. Debrecen : Logos 2000, 1999. 246 s. ISBN 963 03 7660 1.
Odborné články:
CZAKÓOVÁ, K.: Developing algorithmic thinking by educational computer games. In. Proceedings of the 16th International Scientific Conference: “eLearning and Software for Education : eLearning sustainment for never-ending learning. Volume 1, DOI: 10.12753/2066-026X-20-003, 2020/1, p. 26-33. Bucharest : “CAROL I” National Defence University Editura, Universitara, 2020. ISSN 2066-026X, ISSN-L 2066-026X, ISSN CD 2343 – 7669. (Scopus)
CZAKÓOVÁ, K. Mathematical Model Based Interactive Simulations In Education. In. ICERI 2019 Proceedings of the 12th International Conference of Education, Research and Innovation : Enlightening Minds through Education. DOI: 10.21125/iceri.2019.2479, p. 10120-10125, Seville : IATED Academy, 2019. ISBN 978-84-09-14755-7. ISSN 2340-1095. (WOS)
CZAKÓOVÁ, K.: Interaktív modellek és szimulációk az oktatásban. In. XXXII. Didmattech 2019 - Proceedings – New Methods and Technologies in Education and Practice : III New Methods and Tools in Education. Trnava : Trnavská univerzita v Trnave, 2019. ISBN (on line) 978 80 568 0398 1.
CZAKÓOVÁ, K.: Microworld environment of small language as „living laboratory” for developing educational games and applications. In. Proceedings of the 13th International Scientific Conference „eLearning and Software for Education“ : Could technology support learning efficiency? Volume 1, DOI: 10.12753/2066-026X-17-042, 2017/1, p. 286-291. Bucharest : “CAROL I” National Defence University Publishing House, 2017. ISSN 2066-026X ISSN-L, 2066-026X, ISSN CD 2343 – 7669.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Student workload:
55% - participation in lessons, preparation for the exam,
45% - study of literature, completion of programming tasks, preparations for semester work.

Evaluation of subjects
Total number of evaluated students: 1

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

Teacher: Dr. habil. Dr. Gábor Kiss, PhD., PaedDr. Krisztina Czakóová, PhD.
Date of last update: 02.03.2022
Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ TXE/22	**Name:** Text editors

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 0 / 2 **For the study period:** 0 / 0 / 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 1.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Students are required to actively participate in class, which is monitored and counts for 20% of the overall course grade. During the semester, students work on their two semestral works, which are required and must be turned in for grading. The course ends with an exam. Grading is determined by the average of the 2 graded semestral works, each of which students must complete at least 50%.
The student is classified according to the average obtained in the tests and its defense (80% of the total grade) and active participation in the exercises (20% of the total grade). To obtain grade „A“ students have to obtain minimum 90% of the total score, to obtain grade „B“ students have to obtain 80% of the total score, to obtain grade „C“ students have to obtain 70% of the total score, to obtain grade „D“ students have to obtain 60% of the total score, to obtain grade „E“ students have to obtain 50% of the total score. There is no credit for the subject if a student obtains less than 50%.

Results of education:
Knowledge:
The student has knowledge of word processors, proficiency in the LaTex word processor.
Skills:
The student is able to use the LaTex word processor, is proficient in word processing, and is able to program in LaTex at a basic level. The student is proficient in the basic principles of creating structured text documents in the TeX typographic system (LaTeX).
Competences:
The student is characterized by independence in working in Latex at the user level.

Brief syllabus:
1. The environment of text editors and their basic functions.
2. Text editors (types of text editors: interpreters).
3. The environment of text editors and their basic functions.
4. Document creation standards. Basic document structure.
5. Introduction to TeX.
6. Writing plain texts, choice of font size and type.
7. LaTeX environments for creating lists, bullets, tables, simple charts.

8. Setting mathematical formulae, equations, matrices, etc. Cross-referencing.
9. Fundamentals of TeX programming.
10. Creating simple macros.
11. Incorporating graphics into text.
12. Creating presentations.
13. Elaboration of the selected topic and independent creation of a professional text.

Literature:

1. STOFFA,V. - CSÍZI,L. - SZŐKÖL, I. - TÓTH, K. - VÉGH,L.: Az informatika alapjai I. Komárno: UJS, 2007, s. 268. ISBN 978-80-89234-29-5.
2. STOFFOVÁ, V. - CSÍZI, L. - TÓTH, K. - SZŐKÖL, Š.: Informačné a komunikačné technológie v praxi II. Komárno : Univerzita J. Selyeho, 2007, s. 316. ISBN 978-80-89234-42-4.
3. STOFFOVÁ, V. - CSÍZI, L. - TÓTH, K. - SZŐKÖl, Š.: Információs és kommunikációs technológiák a gyakorlatban II. Komárno : Univerzita J. Selyeho, 2007, s. 316. ISBN 978-80-89234-69-1.
4. RYBIČKA, J.: LATEX pro začátečníky. 3. vyd. Brno : nakladatelství KONVOJ, spol. s.r.o., 2003. 239 s. ISBN 80-7302-049-1.
5. WETTL, F. – MAYER, Gy.: Latex kézikönyv : Könnyen is lehet! 1. vyd. Budapest : Panem, 2004. 768 s. ISBN 963 545 398 1.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Student workload distribution:
45% - attendance at tutorials, exam preparation,
55% - studying literature, practicing acquired knowledge, working on practical assignments, preparing term papers.

Evaluation of subjects
Total number of evaluated students: 7

A	B	C	D	E	FX
57.14	42.86	0.0	0.0	0.0	0.0

Teacher: RNDr. József Udvaros, PhD., PaedDr. Márk Csóka

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ UDI/22	**Name:** Introduction to IT
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 2 / 1 / 0 **For the study period:** 26 / 13 / 0 **Methods of study:** present	
Number of credits: 4	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the semester, students write two written papers, which are evaluated as a percentage. Students must achieve a score of at least 50% for both written papers in order to take the exam. During the semester, students work independently on a semester assignment or project (processing of literature), and they can receive a total of 20 points out of a total of 100 points for their submission and presentation. The combined exam consists of a written and oral part. To pass the exam, students must achieve at least 50% in the oral exam. The students are classified based on the obtained average, which includes the continuous performance of the semester, the work of the semester project and the result of the exam. A grade is at least 90 points, B grade is at least 80 points, C grade is at least 70 points, D grade is at least 60 points and E grade is at least 50 points. A student who scores less than 50 points cannot receive credit.	
Results of education: Educational results - knowledge: After completing the subject, the student: • knows the role, tools and solutions of IT; • knows the concept of data and the principles of information and processing; • knows the basic principles of coding and displaying information on a computer and simple methods for their processing; • knows the principles of basic mathematical operations and conversions performed in the binary system, as well as the floating-point representation of real numbers; • knows the connections between individual number systems (conversions, transformations); • can think algorithmically and apply knowledge to solve the problem; • knows the basic principles of creating and graphically representing formal algorithms; • knows the classification of programming languages, the structure of the given programming language (e.g. Python), knows the elements and programming structures of the given language (condition, cycle, functions). Learning outcomes - skills: After completing the subject, the student: • can analyze and solve problems using a programming language; • able to independently apply an algorithm to solve a specific problem;	

• can divide the problem into smaller sub-problems;
• can think algorithmically;
• capable of conversions between number systems;
• able to recognize the repetitive tasks of the problem and solve them with the necessary program structure (cycle, state);
• able to select the necessary data structures in the program;
• able to design and implement a program in the given programming language.
Educational results - competences:
After completing the subject, the student:
• shows a high degree of independence in solving problems and creating programs to solve them;
• characterized by creative thinking and independence;
• uses creative IT and algorithmic thinking to solve problems;
• can explain everyday IT problems;
• has an active and responsible attitude towards the completion of subject tasks

Brief syllabus:
1. Definition of basic concepts, IT tools, storage, data processing, algorithm.
2. Graphic representation of the algorithm, with a branching condition.
3. Graphic representation of the algorithm using cycles.
4. Graphic representation of the algorithm, solving complex tasks.
5. Number systems, conversions.
6. Number systems, basic mathematical operations.
7. Numerical representations, fixed precision representation, floating precision representation.
8. Program creation process, planning, steps, development cycle.
9. Classification of programming languages, work in a specific programming language (e.g Python), concepts and structure.
10. Programming algorithms with branching.
11. Programming algorithms using cycles.
12. Programming algorithms using functions and procedures.
13. Programming complex algorithms, displaying functions, drawing using programming tools.

Literature:
1. ANNUS, G.: Informatikai alapok. Szeged : JGYF Kiadó, 2001. 204 s. ISBN 0991508.
2. KATONA, Gy.: A számítástudomány alapjai. Budapest : Typotex Elektronikus Kiadó Kft., 2002. 192 s. ISBN 963 9326 24 0.
3. KOVÁCS, M.: Bevezetés a Számítástechnikába. Budapest : LSI Oktatóközpont, 2002. 368 s. ISBN 963 577 270 X.
4. STOFFA, V.: Az informatika alapjai I. (Základy informatiky). Apáczai közalapítvány, 2007. 268 s. ISBN 978-80-89234-29-5.
5. STOFFA, V.: Algoritmizáció és programozás I. (Algoritmizácia a programovanie I). Komárno : Univerzita J. Selyeho v Komárne, 2005. 174 s. ISBN 80-969251-7-2.
6. STOFFOVÁ, V.: Informatika. Informačné technológie a výpočtová technika. Nitra : Prírodovedec, 2001. 230 s. ISBN 80-8050-450-4.
7. STOFFOVÁ, V.: Počítač univerzálny didaktický prostriedok. 1. vyd. Nitra, 2004. 173 s. ISBN 80 8050 765 1.

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Distribution of student workload:

60% - participation in lessons, preparation for background checks and exams,
40% - study of professional literature, practice of acquired knowledge, work on practicals assignments.

Evaluation of subjects
Total number of evaluated students: 13

A	B	C	D	E	FX
23.08	30.77	38.46	7.69	0.0	0.0

Teacher: Dr. habil. Attila Elemér Kiss, CSc., PaedDr. Márk Csóka

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ BCZ/22	**Name:** Human biology and basics of first aid
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The condition for passing the subject is active participation in the seminars, which consist of a theoretical and practical part. During the practical part, the student will try out, practice, and at the end, demonstrate basic practical skills in providing emergency first aid in various simulated situations and various types of injuries and accidents. The partial evaluation of the subject represents the evaluation of the protocols for some human organ systems, which the student will receive as homework (30%). In the final part, the student proves his theoretical knowledge by completing the test (70%). Final grade of the subject: A – 100-90%, B – 89-80%, C – 79-70%, D – 69-60%, E – 59-50%. Achieving 50% of the total points is necessary to award credits. Total student load: 2 credits = 60 hours (13 hours: participation in seminars, 47 hours: self-study and preparation for the exam, preparation of protocols).	
Results of education: Knowledge: - The student can characterize the ontogenetic development of a person from the formation of gametes through pre-embryonic development to the end of post-embryonic development. - The student can characterize the individual organ systems of a person with an emphasis on the morphological and functional characteristics of these systems in specific age periods, focusing mainly on childhood and adolescence. - The student can summarize theoretical knowledge about basic life-saving actions, disorders of consciousness, breathing disorders, seizures, bleeding from wounds, shock, fractures, joint injuries, and burns. Abilities: - The student can understand and grasp the physiological processes that take place in the human body. - The student can explain and use the anatomy, morphology, and physiology of the human body in his teaching practice. - The student can practically perform essential emergency support of life functions - opening the airways, rescue breathing, chest compressions (heart massage), stopping bleeding, stabilizing position, cardiopulmonary resuscitation (revival), including the use of automatic external defibrillation,	

- The student can provide psychological support to the disabled.
- The student can explain the importance of health protection already in childhood and can approach individual problems related to biological development processes in the organism concerning the given age of the child.
- The student can practically use knowledge and skills in dealing with sudden life and serious health-threatening processes of traumatic and/or non-traumatic origin.
Competencies:
- The student gains an overview of the functioning of the human body and the diseases that can most often affect human health, thereby gaining a positive attitude towards protecting and maintaining their health.
- The student acquires a positive attitude toward providing first aid and preventing sudden threats to the life and health of school-age children and adults.

Brief syllabus:

Characteristics of cell structure, individual tissue types. Ontogenetic development.
Human skeleton, characteristics of bones, morphological and functional characteristics of the skeleton in childhood. First aid for joint injuries, broken limbs, skull, and spine.
Characteristics of the muscular system, morphological and functional characteristics of the muscular apparatus in childhood. First aid for injuries to tendons, muscles, and contusions.
Respiratory system, morphological and functional characteristics of the respiratory system in childhood. First aid for respiratory arrest, removal of a foreign body from the airways, artificial respiration.
Circulatory system, morphological and functional characteristics of the circulatory system in childhood.
First aid for cardiac arrest, blood clotting, stopping bleeding in different types of wounds, types of dressings, and wound dressing techniques.
Characteristics of sense organs. Morphological and functional characteristics of sensory organs in childhood.
First aid for burns caused by caustics and chemicals.
Structure of the nervous system, morphological and functional characteristics of the nervous system in childhood. Damage to the nervous system, epileptic seizure, convulsions, and first aid.
Characteristics of the endocrine system, hormones, morphological and functional characteristics of the endocrine system in childhood.
Characteristics of genital systems. Morphological and functional characteristics of the genital system in childhood. The most common sexually transmitted diseases.
Gastrointestinal system, morphological and functional characteristics of the gastrointestinal system in childhood. Poisoning, drug poisoning, alcohol poisoning, food poisoning.
Excretory system, morphological and functional characteristics of the excretory system in childhood. The most common diseases of the excretory system.
Types of shock states, distributive types of shock, anaphylactic shock, and allergies.

Literature:

ANDICS, L.: Elsősegély: Közúton, otthon, munkahelyen, közterületen – 1. vyd. – Budapest: Sophia Kiadó, 2004 – 86 s. – ISBN 963216279X.
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McCracken, T. O.: Háromdimenziós anatómiai atlasz. Budapest : Scolar Kiadó, 2000. - 237 s. - ISBN 978-963-9193-99-4.
NAGY, M.: Humánbiológia. – 1. vyd. – Komárno – Dunajská Streda: Selye János Egyetem – Lilium Aurum, 2006. – 250 s. – ISBN 8080622833.
PORÁČOVÁ, J., NAGY, M., BERNÁTOVÁ, R., a kol. Fyziológia živočíchov a človeka - 1. vyd. - Prešov : Fakulta humanitných a prírodných vied PU v Prešove, 2014. - 591 s., [36,65 AH]. - ISBN 978-80-555-1150-4.
STOPPARDOVÁ, M.: Prvá pomoc malým deťom: Stručný sprievodca prvou pomocou. – 1. vyd. – Bratislava: Slovart s.r.o., 2005. – 63 s. – ISBN 80-8085-022-4.
SZENTÁGOTHAI, J.: Funkcionális anatómia I.-III. Budapest : Medicina Könyvkiadó, 2006. - 710, 600, 800. - ISBN 963 242 565 0.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 82

A	B	C	D	E	FX
4.88	10.98	30.49	26.83	7.32	19.51

Teacher: Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD., Dr. habil. PaedDr. Melinda Nagy, PhD., RNDr. Eva Tóthová Tarová, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ DID/22	**Name:** General didactics and preparation for school observation

Types, range and methods of educational activities:
Form of study: Lecture / Seminar
Recommended extent of course (in hours):
Per week: 1 / 1 **For the study period:** 13 / 13
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 2.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Prerequisites:
1. Preparation for the selected educational activity (lesson)
2. Observation sheets
3. Final exam - 100 points
As a condition for admission to the examination, the student must submit a preparation for the selected learning activity (lesson) in the context of solving the assigned problem independently (or in pairs) and
observation sheets to be completed in the student's logbook.
Total student workload in terms of time allocation: 2 credits = 60 hours
- attendance at lectures and seminars (26 hours),
- preparation for class (10 hours),
- preparation of observation sheets (10 hours),
- preparation for the final examination (14 hours).
Final assessment: maximum score of 100 points. A passing grade is required to achieve at least 50 points, i.e. 50% of the total, with the condition that at least half of the points (50%) must be obtained in each assignment. To achieve a grade A, you must achieve 90-100% (90-100 points); for grade B, 80-89% (80-89 points); for grade C, 70-79% (70-79 points); for grade D, 60-69% (60-69 points); and for grade E, 50-59% (50-59 points) of the total number of points.

Results of education:
Knowledge:
The student knows
- basic didactic concepts and the place of didactics in pedagogical science,
- The main trends in epistemology,
- The student will learn the basic principles of epistemology, the main ideas of epistemology, the main concepts of epistemology, the operations of thought and the limitations of rational thought,
- the most important theories and models of learning,
- age characteristics of children and age-specific features of their thinking,
- the main theories of motivation,
- the aims and outcomes of education and learning,
- methods and means of planning the educational process,

- educational strategies, including the main methods, forms of work and means.
The student has specific knowledge of :
- Modern techniques of project planning, imaging means, their purpose and applicability,
- Conscious planning for consistency of pedagogical content, objective and expected outcomes,
- contexts of sub- and final expected products,
- the content breakdown and methods of completing documents used during the hospitalization,
- the student knows the laws and principles of didactics of the age in question,
- the student knows the theoretical background, aspects, requirements and strategies for the implementation of educational work in schools,
- the student increases awareness of the role and importance of the state and institutional/school educational program,
- the student knows the aspects and requirements of planning, organization, implementation and evaluation, as well as the structure of thematic plans and preparations.
Skills:
The student is able to:
- Consciously summarize the sub- and final expected pedagogical products as part of their planning activities,
- integrate modern planning tools in the development of educational planning and preparation,
- apply the methodological toolkit,
- plan educational activities on the basis of the state educational programme,
- categorize the system of requirements based on the skill level of students based on their age and individual characteristics and can also, appropriately assign teaching objectives and strategies in accordance with the content of education,
- choose methods (methods and tools) of assessment and self-assessment, apply assessment questions depending on the age and individual characteristics of pupils,
- analyse the educational realities seen on the basis of given aspects and criteria (achievement of the objective, appropriateness of methods and strategies, etc.).
Competences:
Student:
- is able to imply his/her own theoretical-didactic knowledge into his/her own pedagogical practice,
- is able to present, explain and justify in detail those educational strategies which he/she has consciously chosen and applied in the process of pedagogical planning,
- is able to present the complex aspects and expectations of hospitality and pedagogical planning,
- feels responsible for adherence to ethical principles,
- is able to communicate and collaborate effectively,
- feels responsible for the correct analysis of a methodological and professional problem,
- identifies with the role of the teacher in accordance with professional expectations,

Brief syllabus:
The concept and place of didactics in pedagogy.
Epistemological aspects of education.
Thought operations.
Education, teaching and learning: theories and models.
Planning the educational process.
The teacher and his strategies. Methods and teaching aids.
Basic didactic concepts and principles of education and training. Pedagogical documentation.
Curriculum documents, the structure of the current state educational program, its application in the development of the institutional educational program. Its position in the planning of educational activity.

Educational process and its stages. Organisational forms.
Planning of educational work, levels of planning.
Explanation, evaluation and summary of professional experience gained during the hospitalization. Reflective (analytical) and self-reflective (self-analytical) activities of the assistant, teacher. Methodological basis of evaluation and self-evaluation.
Methodological preparation of students for the profession of teacher, assistant teacher. Practical aspects of the implementation of pedagogical work. Preparation for observation. Observation and analysis of pedagogical phenomena. Content analysis. Pedagogical diary. Portfolio.

Literature:

Compulsory literature:

Az óvodai nevelés állami oktatási programja – magyar nyelvű fordítás. 2019. Markovics, T. (szerk). Komárom : Comenius Pedagógiai Intézet, khsz., 2019. 168 o. ISBN 978-80-969694-2-5.
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HORVÁTH, K.- NÉMETH, A.- STRÉDL, T. - SZABÓOVÁ, E. - TÓTH BAKOS, A. 2015. Szlovák-magyar pedagógiai terminológiaia kézikönyv. Slovensko-maďarská pedagogická terminologická príručka. 1. vyd. Komárno : Selye János Egyetem - UJS, 2015, 132 p. ISBN 978-80-8122-160-6.
KOVÁCS, GY.- BAKOSI, É. 2004. Óvodapedagógia. Debrecen, 2004, 1. kötet 226 o. ISBN 963 430 924 0. [online]. Dostupné na internete: https://dea.lib.unideb.hu/dea/bitstream/handle/2437/268618/FILE_UP_0_Ovodapedagogia.pdf?sequence=1&isAllowed=y
KOVÁCSNÉ BAKOSI, É. 2013. A szabadidő pedagógiai kérdéseihez. [online]. Dostupné na internete: http://socprof.partium.ro/Documents/Training%20material%201.pdf
Štátny vzdelávací program pre predprimárne vzdelávanie v materských školách. Bratislava: Ministerstvo školstva, vedy, výskumu a športu Slovenskej republiky a Štátny pedagogický ústav. 112 s. [online]. Dostupné na internete: https://www.minedu.sk/data/files/6317_svp_materske_skoly_2016-17780_27322_1-10a0_6jul2016.pdf Štátny vzdelávací program pre predprimárne vzdelávanie v materských školách (statpedu.sk)
Slovensko-maďarský glošár školskej terminológie. Szlovák- magyar közoktatási szószedet. 2020. Bratislava: Ministerstvo školstva, vedy, výskumu a športu SR. [online]. Dostupné na internete: https://www.minedu.sk/data/files/9495_final_svk_mad.pdf
SZABÓOVÁ, E. 2018. Személyiségfejlesztő nevelő-oktató tevékenységek az óvodában. In: Orsovics, Y., Strédl, T., Szabóová, E., Vass, V. 2018. A személyiségfejlesztés új kihivásai a nemzetiségi óvodákban és iskolákban. Komárno : Selye János Egyetem, Tanárképző Kar, 2018. p. 59-105. ISBN 978-80-8122-282-5.
Vyhláška č. 541/2021 Z. z.Vyhláška Ministerstva školstva, vedy, výskumu a športu Slovenskej republiky o materskej škole. [online] Dostupné na internete: https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2021/541/
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Recommended literature:
ALBERT, S. 2005. Didaktika.1. vyd. Dunajská Streda : Lilium Aurum, 2005. 290 s. ISBN 80-8062-252-3.
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DEREVJANÍKOVÁ, A.- DZURILLA, M. 2014. Hudobná výchova v predprimárnej edukácii. Bratislava: MPC, 57 s. ISBN 978-80-8052-900-0. [online] Dostupné na internete: https://archiv.mpc-edu.sk/sites/default/files/projekty/vystup/derevjanikova_dzurilla_0.pdf
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MASARYKOVÁ, D. 2014. Vzdelávacia oblasť Zdravie a pohyb. Bratislava: Metodicko-pedagogické centrum. Metodická príručka. 38 s. ISBN 978-80-8052-891-1. [online]. Dostupné na internete: https://mpcedu.sk/sites/default/files/publikacie/zdravie_a_pohyb_metodicka_prirucka_zal-_na_webe.pdf
Metodický list na osvojovanie štátneho – slovenského jazyka v materských školách s vyučovacím jazykom národnostných menšín. 2016. Bratislava: ŠPÚ. [online]. Dostupné na internete: https://www.statpedu.sk/files/sk/metodicky-portal/metodicke-podnety/ppv_metodicky-list_odborne-pojmy.pdf
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ZÁPOTOČNÁ, Z.- PETROVÁ, Z. 2016. Jazyk a komunikácia. Metodická príručka k vzdelávacej oblasti Štátneho vzdelávacieho programu pre predprimárne vzdelávanie. Bratislava: ŠPÚ. 27 s. ISBN 978 – 80 – 8118 – 175 – 7. [online]. Dostupné na internete: https://www.statpedu.sk/files/sk/svp/zavadzanie-isvp-ms-zs-gym/materska-skola/zrevidovane_jazyk-komunikacia_na_zverejnenie.pdf

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 59

A	B	C	D	E	FX
22.03	11.86	8.47	16.95	32.2	8.47

Teacher: Dr. habil. Erika Kopp, PhD., prof. Dr. Péter Tóth, PhD., Dr. habil. PaedDr. Kinga Horváth, PhD., Dr. László Pribék, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ DOC/22	**Name:** Volunteering, helping activities
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 6.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The final assessment is a portfolio, i.e. based on the work produced during the volunteering activity (30 points). The conditions for completing the course are set and regulated by the Directive of the Dean of the Faculty of Education UJS: Principles of pedagogical practice at the Faculty of Education UJS student is obliged to follow the relevant part of this document, related to the pedagogical practice. Students shall prepare the following documents during their volunteer activity. He/she is obliged to submit an accurately and bilingually completed protocol on the completion of the volunteer activity and to create a portfolio based on a previously created and consulted structure. Mandatory components of the portfolio: - The portfolio must include a bilingually completed volunteering protocol. - The portfolio must include the structure of the volunteering organisation (observation of individual non-formal learning activities) (10 points) - The portfolio must include the activities of their work in the field carried out during the volunteering activity (10 points) - Documentation of the period (preparation for each activity) (10 points). Total student workload: 1 credit = 30 hours Participation in 13 hours of practicum (contact hours); 10 hours of preparation for, and participation in, volunteer activities; 7 hours of portfolio preparation.	
Results of education: Knowledge: • The student can monitor, analyse, volunteer activities. • The student will be able to document the activities observed in the volunteer organization, • The student will be able to plan, organize and conduct individual education and leisure activities in the organization. • The student is able to build positive interpersonal relationships with the organization's leadership and to establish positive relationships with people. Ability: • The student will be able to work with members of the volunteer organization. • The student will be able to participate actively in the activities of the organization.	

• Through informal activities, the student will be able to manage, organize and create an event for a voluntary organization.
Competences:
• The student will be able to apply the knowledge and skills required for positive interpersonal relationships to a given volunteer organization, which may influence future professional choices.
• The student will be able to develop a targeted self-awareness of volunteering.
• The student will be able to design their own activities to enhance their knowledge in voluntary organizations.
• The student will be able to create an atmosphere of reliable, helpful, encouraging, attentive and accepted conduct, it is open to learning about and managing the working style of volunteer organizations.

Brief syllabus:
Observation and evaluation of interior and exterior spaces in a voluntary organisation. Observation of the creation of conditions for the implementation of activities in the voluntary organisation. Professional analysis of the observed activities together with the staff of the voluntary organisation. Documenting the progress and results of the individual activities observed. Preparation of a portfolio of the observation activity with all its components based on predetermined criteria by the course leader, with the application of autonomy and alternativeness based on current trends.

Literature:
Aktuálny vnútorný predpis UJS: Zásady realizácie pedagogickej praxe na Pedagogickej fakulte UJS, https://www.ujs.sk/documents/SHK_2017_24_04_18_Fin3.doc.pdf
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Pusztai Gabriella, Lukács Ágnes: KözössÉGteremtők : Tisztelgés a magyar vallásszociológusok nagy nemzedéke előtt / - 1. vyd. – Debrecen, Debreceni Egyetemi Kiadó, 2014. - 406 s. - ISBN 978-963-318-424-0.
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Az ifjúságsegítő képzés interprofesszionális fejlesztése, TÁMOP-5.4.4.-09/2-C-2009-0002,2012, ISBN 978-615-5192-09-8, https://oszkdk.oszk.hu/storage/00/00/51/50/dd/1/onkentesseg_v2.pdf
Szentpétery Daniel: A Diákhálózat szervezeti kultúrájának elemzése- Komárno : Univerzita J. Selyeho, 2015. - 107 s.
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Dobrovoľnícke združenia v Komárne - https://www.azet.sk/katalog/obcianske-zdruzenia/komarno/

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 4

a	n
100.0	0.0

Teacher: Dr. habil. PaedDr. Beáta Dobay, PhD., Dr. László Pribék, PhD., Gyöngyi Gál, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ DTV/22	**Name:** Digital technologies in the educational process

Types, range and methods of educational activities:
Form of study: Seminar
Recommended extent of course (in hours):
Per week: 1 **For the study period:** 13
Methods of study: present

Number of credits: 1

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The prerequisite is active participation in the exercises and continuous compilation of a portfolio of specific digital/virtual/online tools that are implemented in the pedagogical or educational process.
The categories of the portfolio evaluation are: submission on time, consideration of formal requirements (orderliness, logical interconnection, aesthetics) and content requirements (methodology of the developing assessment tool, didactic treatment of the implementation of the assessment tool in education). The table of assessment criteria will be available to students on moodle after logging in to the e-learning course.
The final grade will be calculated as follows:
(0.1 x % of active participation in the exercises)+ (0.9 x % obtained from the portfolio assessment)
Total student workload: 1 credit = 30 hours
13 hours participation in seminars (contact hours); 17 hours portfolio preparation.
To achieve a grade of A, 90-100%; for a grade of B, 80-89%; for a grade of C, 70-79%; for a grade of D, 60-69%; and for a grade of E, 50-59% of the total number of points must be earned.

Results of education:
Knowledge:
Possesses knowledge of the digital society with respect to the teaching profession and the performance of its activities.
Knows the challenges of the digital world reflected in education.
Knows how to relate the appropriate digital tool to each pedagogical objective.
Knows the possibilities of online learning to support active student learning.
Knows the strategies, methods and forms offered by digital technologies and virtual reality to develop students' subject and digital literacy,
Has knowledge of the risks of the digital world. Knows the principles of netiquette and effective communication in the digital world.
Skills:
Possesses basic methodological competencies and skills in ICT.
Independently applies adequate methods of working in the digital world.

Is able to navigate in the digital world of information and use e-resources in the performance of professional activities.
Is able to navigate the range of possibilities for the use of digital technology to support - the developmental processes of individuals, their positive lifelong stimulation and the differences in the development of individuals resulting from health or social disadvantages.
Competences:
Characterized by creative thinking, independence in planning his/her own education, autonomy and responsibility in decision-making in relation to issues of pedagogy and subject-specific areas of didactics,
can work effectively independently in the online world,
is competent to exercise the profession of a pedagogical employee, meets the requirements of the professional standard of a beginning pedagogical employee in terms of digital literacy.
Can reflect on and improve the effectiveness of his/her own teaching activities. Can identify with his/her own profession.
Identifies with the attitude of a teacher whose duty it is to support talented, but also to support weaker pupils and pupils with special educational needs in their cognitive development, including through digital technologies.

Brief syllabus:

Cognitive process in the digital world. Appropriate tools for pedagogical purposes. Familiarity with selected applications.
Applications supporting the online cognitive process and its management through virtual classrooms.
Online tools to support cooperative learning. Augmented reality options.
Assessment supported with digital technology. Online application for instant feedback. Creation of online tests/quizzes.
Intervention and inclusion in digital pedagogy. Supporting pupils with special educational needs through digital technology
Data protection and online safety.

Literature:

ABONYI-TÓTH, A., TURCSÁNYI_SZABÓ, M. A mobiltechnológiával támogatott tanulás és tanítás módszerei. Educatio Társadalmi Szolgáltató Nonprofit Kft., 2015, (dostupné na internete: https://www.educatio.hu/pub_bin/download/tamop311_II/eredmenyek/m_learning/mlearning_kotet.pdf)
FARKAS, A. et al. Digitális pedagógiai módszertani ajánlások gyűjteménye. Budapest: Oktatási Hivatal. 2021. (dostupné na internete: https://www.oktatas.hu/pub_bin/dload/kozoktatas/tavoktatas/Modszertani_gyujtemeny_01_08_compressed.pdf)
JÓZSA, K., et al. FOCUS teszt: új, számítógépalapú vizsgálati eszköz 3–8 éves gyermekek számára. Gyermeknevelés, 2019. (7)2–3, 111–124. (dostupné na internete: https://www.researchgate.net/publication/338986310_FOCUS_teszt_uj_szamitogep-alapu_vizsgalati_eszkoz_3-8_eves_gyermekek_szamara)
KALAŠ, Ivan et al. Premeny školy v digitálnom veku. Bratislava: SPN – Mladé letá,s.r.o.,2013. ISBN 978-80-10-02409-4. Košice: pre UIPŠ vydal elfa, s.r.o., 2010. ISBN 978-80-8086-143-8.
LÉVAI, D., PAPP-DANKA, A. Interaktív oktatásinformatika. Eger: Eszterházy Károly Főiskola, ISBN 978-615-5297-74-8, (dostupné na internete: http://www.eltereader.hu/media/2016/02/Interaktiv_Oktatasinformatika_READER.pdf)
TÓTH-MÓZER, SZ. – MISLEY, H. Digitális eszközök integrálása az oktatásba Jó gyakorlatokkal, tantárgyi példákkal, modern eszközlistával. Budapest: Eötvös Loránd

Tudományegyetem. 2019. ISBN 978-963-489-129-1. (dostupné na internete: http://mindenkiiskolaja.elte.hu/wp-content/uploads/2019/09/Digit%C3%A1lis-eszk%C3%B6z%C3%B6k-integr%C3%A1l%C3%A1sa-az-oktat%C3%A1sba_INTERA.pdf)
SZARKA, K. Inovácie v pregraduálnej príprave učiteľov s využitím webových aplikácií. 1. vyd. Komárom: KOMPRESS Nyomdaipari Kft., 2018. 154 s. [11,21AH]. ISBN 978-615-00-2597-1.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 16

A	B	C	D	E	FX
50.0	12.5	25.0	6.25	6.25	0.0

Teacher: prof. Dr. Krisztián Józsa, DSc., Mgr. Katarína Szarka, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ IPG/22	**Name:** Inclusive pedagogy
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 6.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The condition for successful completion of the course is active participation in lectures and seminars, as well as successful completion of written examinations. The resulting evaluation consists of points obtained for fulfilling the conditions in the form of: max. 30 points for presence, max. 70 points for exam. The student can get a maximum of 100 points. Final assessment of the subject: A 100-90%, B 89-80%, C 79-70%, D 69-60%, E 59-50%. The FX rating is awarded if the student achieves less than 50% of the total number of points. Total student workload: 1 credit = 30 hours (13 hours: attendance at lectures, 17 hours: self-study and exam preparation).	
Results of education: Knowledge: • Masters the basic competences for approaching a student with special educational needs from a theoretical and practical point of view. • Knows and understands basic concepts such as segregation, integration, inclusion. • Can define the terms special pedagogy, therapeutic pedagogy. • Acquires professional knowledge, acquires developmental criteria, personality characteristics and psychological guidelines for participants in public education. • Can transform theory into practice, knows progressive trends in the field of special pedagogy. • Knows the types and types of SEN, disabilities and other disorders of the relevant age period. • Orients himself correctly according to the Methodological Instructions of the Ministry of Education of the Slovak Republic for the inclusion of pupils with SEN, controls the individual educational plan and program. Skills: • Can recognize the symptoms of individual cases of SEN, disorders and disabilities. • Orients itself in the possible reasons for the occurrence of individual cases of SEN, disorders and disabilities. • Can compile pedagogical-psychological and subject criteria according to the physical and mental age of children and pupils. • Can navigate the methods of the given issue, apply observation schemes, screening. • Can differentiate children and pupils with SEN, proceed according to the individual educational plan.	

• Can research and formulate the theoretical and practical starting points needed to solve the encountered problems.
• Can cooperate and consult with other experts, work in a team.
Competences:
• Responds to problems flexibly and well-founded, acts democratically, acts tolerantly.
• Applies principles of inclusive thinking, optimal working climate, cooperative methodology.
• Implements targeted development of self-knowledge, participates in further education.
• Independently plans activities that expand knowledge about social services, can create an atmosphere of trustworthiness, helpful, encouraging, attentive, accepting behavior towards students.

Brief syllabus:

Subject, mission and goals of therapeutic and special pedagogy, education of the disabled. Basic terms: segregation, integration, inclusion, norm, normality, abnormality, reversibility, irreversibility.
School problems: difficulties, disorders, falling behind.
Types and types of SEN - indicators for the inclusion (integration) of children and pupils.
Sensory, physical and mental disabilities, communication skills disorders, learning disorders, giftedness, psychosocial disorders, other types and types of disorders and difficulties.
Options and principles of integration.
Individual educational plan and program - development and implementation.
Cooperation with the inclusive team and counseling centers, school psychologist and school special educator.
Overview of stimulation programs and their application possibilities in the educational process, development and development - educational options, therapy, corrections, re-education as options for optimizing the educational process of pupils with specific developmental learning disabilities.

Literature:

ATKINSON, R. 2000. Pszichológia. (Psychológia). Budapest : Osiris Kiadó. 2000.
BORDÁS, S., FORRÓ, Zs., NÉMETH, M. STRÉDL, T. 2005. Pszichológiai jegyzetek. 1. vydanie 2005. Komárno: UJS. ISBN 8096925156
KASTELOVÁ, A. – NÉMETH, O. 2014. Základy špeciálnopedagogickej diagnostiky a základy špeciálnopedagogického poradenstva. Bratislava : IRIS, 2013. 210 s. ISBN 9788089726011.
MÉREI, F. – V. BINET, Á. 2017. Gyermeklélektan. Budapest: LIBRI. 2017. 404 o. ISBN 9789633107997
N. KOLLÁR, K. 2004. Pszichológia pedagógusoknak. Budapest : Osiris Kiadó, 2004. 637 s. ISBN 963389672X
STRÉDL, T. 2013. Inkluzív pedagógia avagy a gyógypedagógiáról másképp. Komárno : UJS. ISBN
STRÉDL, T. 2017. Terápiák és nevelés : A terápia szocializációs hatása a nevelésben. 1. vyd. Komárno : Univerzita J. Selyeho, 2017. 102 s. ISBN 9788081222276
STRÉLD, T. 2015. Befogadás és/vagy elfogadás : Zborník medzinárodnej vedeckej konferencie Univerzity J. Selyeho - 2015 : "Inovácia a kreativita vo vzdelávaní a vede" - Sekcie pedagogických vied. - Komárno : Univerzita J. Selyeho, 2015. - ISBN 978-80-8122-144-6, CD-ROM, p. 214-229.
STRÉDL, T. 2009. Differenciálás az oktatásban : Katedra : Szlovákiai magyar pedagógusok és szülők lapja. - ISSN 1335-6445, roč. 17., č. 4 (2009), s. 10-11.
STRÉDL, T. 2014. Esélyegyenlőség - és egyenőtlenség az oktatásban : A köznevelés kulturális, szociális és biológiai tényezői = Kultúrne, sociálne a biologické faktory edukácie - vedecký zborník Katedry pedagogiky a Katedry biológie PF UJS v Komárne : A SJE TKK

Neveléstudományi Tanszékének és Biológia Tanszékének tudományos tanulmánykötete. - Komárno : Univerzita J. Selyeho, 2014. - ISBN 978-80-8122-114-9, CD-ROM, p. 84-89.
STRÉDL, T. 2013. Inkluzív pedagógia : avagy a gyógypedagógiáról másképp : Komárno : Univerzita J. Selyeho, 2013. - 148 s.[8 AH]. - (Monographiae Comaromienses 14.). - ISBN 978-80-8122-089-0.
TÓTH-BAKOS, A. 2014. Az egészségünkben akadályozottak és a zeneterápia : A köznevelés kulturális, szociális és biológiai tényezői = Kultúrne, sociálne a biologické faktory edukácie - vedecký zborník Katedry pedagogiky a Katedry biológie PF UJS v Komárne : A SJE TKK Neveléstudományi Tanszékének és Biológia Tanszékének tudományos tanulmánykötete. - Komárno : Univerzita J. Selyeho, 2014. - ISBN 978-80-8122-114-9, CD-ROM, p. 54-59.
VAJDA, ZS. 1990. A gyermek pszichológiai fejlődése. (Psychický vývin dieťaťa). Budapest : 2006 (3. prepracované vydanie)
VAJDA, ZS., KÓSA, É. 2005. Neveléslélektan. (Psychológia výchovy). Budapest : Osiris Kiadó . 2005.
VAŠEK, Š. 1995. Špeciálnopedagogická diagnostika. Bratislava : SPN. ISBN 8008020563
ZELINKOVÁ, O. 2011. Pedagogická diagnostika a individuální vzdělávací program. Praha : Portál, 2011. ISBN 978802620044.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 11

A	B	C	D	E	FX
81.82	9.09	9.09	0.0	0.0	0.0

Teacher: PaedDr. Terézia Strédl, PhD., Mgr. Anita Tóth-Bakos, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ IZS/22	**Name:** Integrated student at school
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 6.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The condition for successful completion of the course is active participation in lectures and seminars, as well as successful completion of written examinations. The resulting evaluation consists of points obtained for fulfilling the conditions in the form of: max. 30 points for presence, max. 70 points for exam. The student can get a maximum of 100 points. Final assessment of the subject: A 100-90%, B 89-80%, C 79-70%, D 69-60%, E 59-50%. The FX rating is awarded if the student achieves less than 50% of the total number of points. Total student workload: 1 credit = 30 hours (13 hours: attendance at lectures, 17 hours: self-study and exam preparation).	
Results of education: Upon completion of the course, the student will Knowledge: • Master the basic competences for approaching a student with special educational needs from a theoretical and practical point of view. • Controls the basic terminology of the given issue, knows various theoretical directions and practical outcomes in practice. • Controls and understands basic concepts such as segregation, integration, inclusion. • Can define the terms special pedagogy, therapeutic pedagogy. • Acquires professional knowledge, acquires developmental criteria, personality characteristics and psychological guidelines for participants in public education. • Can transform theory into practice, knows progressive trends in the field of special pedagogy. • Controls the types and types of SEN, disabilities and other disorders of the relevant developmental age period. • Orients himself correctly according to the Methodological Instructions of the Ministry of Education of the Slovak Republic for the inclusion of pupils with SEN, controls the individual educational plan and program. • Become familiar with methodological approaches, structure and aspects of job descriptions. Skills: • Can recognize the symptoms of individual cases of SEN, disorders and disabilities. • Orients itself in the possible reasons for the occurrence of individual cases of SEN, disorders and disabilities.	

• He can independently evaluate the personality assumptions of the child and student in the educational process.
• Can compile pedagogical-psychological and subject criteria according to the physical and mental age of the students.
• Can navigate the methods of the given issue, apply observation schemes, sceering.
• Can differentiate children and students with SEN, proceed according to the individual educational plan.
• He is able to perform screening and orient himself in pedagogical-psychological diagnostics.
• Can research and formulate the theoretical and practical starting points needed to solve the encountered problems.
• Can cooperate and consult with other experts, work in a team.
Competences:
• Responds to problems flexibly and well-founded, acts democratically, acts tolerantly.
• Applies principles of inclusive thinking, optimal working climate, cooperative methodology.
• Implements targeted development of self-knowledge, participates in further education.
• Independently plans activities that expand knowledge about social services, can create an atmosphere of trustworthiness, helpful, encouraging, attentive, accepting behavior towards students.

Brief syllabus:

Subject and goals of therapeutic and special pedagogy.
Basic terms: segregation, integration, inclusion, standard, normality, abnormality.
Characteristics of children's school developmental period.
School problems: difficulties, disorders, lagging.
Indications for special educational needs of students.
Compilation of observation schemes for individual target groups (screening).
Development and development - educational opportunities.
Indicators for inclusion (integration) of children and students.
Options and principles of integration.
Individual educational plan and program - development and implementation.
Cooperation with the inclusive team and counseling centers.
School psychologist and school special educator.
Overview of incentive programs and their application possibilities in the educational process.

Literature:

ATKINSON, R. 2000. Pszichológia. (Psychológia). Budapest : Osiris Kiadó. 2000.
BORDÁS, S., FORRÓ, Zs., NÉMETH, M. STRÉDL, T. 2005. Pszichológiai jegyzetek. 1. vydanie 2005. Komárno: UJS. ISBN 8096925156
KASTELOVÁ, A. – NÉMETH, O. 2014. Základy špeciálnopedagogickej diagnostiky a základy špeciálnopedagogického poradenstva. Bratislava : IRIS, 2013. 210 s. ISBN 9788089726011.
MÉREI, F. – V. BINET, Á. 2017. Gyermeklélektan. Budapest: LIBRI. 2017. 404 o. ISBN 9789633107997
N. KOLLÁR, K. 2004. Pszichológia pedagógusoknak. Budapest : Osiris Kiadó, 2004. 637 s. ISBN 963389672X
STRÉDL, T. 2013. Inkluzív pedagógia avagy a gyógypedagógiáról másképp. Komárno : UJS. ISBN
STRÉDL, T. 2017. Terápiák és nevelés : A terápia szocializációs hatása a nevelésben. 1. vyd. Komárno : Univerzita J. Selyeho, 2017. 102 s. ISBN 9788081222276
VAJDA, ZS. 1990. A gyermek pszichológiai fejlődése. (Psychický vývin dieťaťa). Budapest : 2006 (3. prepracované vydanie)

VAJDA, ZS., KÓSA, É. 2005. Neveléslélektan. (Psychológia výchovy). Budapest : Osiris Kiadó . 2005.
VAŠEK, Š. 1995. Špeciálnopedagogická diagnostika. Bratislava : SPN. ISBN 8008020563
ZELINKOVÁ, O. 2011. Pedagogická diagnostika a individuální vzdělávací program. Praha : Portál, 2011. ISBN 978802620044.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: PaedDr. Terézia Strédl, PhD., Mgr. Anita Tóth-Bakos, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ MKO/22	**Name:** Minority competencies
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: General conditions for passing the course: active participation of the student in lectures, - participation of the student in the assignments and participation in the analysis and discussions during lectures, - an essay in which the student analyses relevant professional, scientific literature or an article (100 points), or a project proposal for an educational activity with the aim of developing the student's intercultural and minority competences (100 points). Criteria for essay evaluation: - Presentation of a literature review (20 points), - analysis and evaluation (40 points), - drawing conclusions and formulating suggestions (20 points), - elaboration (20 points). Criteria for evaluation of the educational activity project proposal: - Content (40 points), - originality (20 points), - formality (20 points), - presentation of the literature review (20 points). Total student load: 2 credits = 60 hours - 13 hours lecture attendance; 20 hours self-study; 27 hours preparation of term papers. The condition for successful completion of the course in both training modules is obtaining at least 50% of the maximum course grade. Overall course pass mark: - A = 90 - 100% (90 - 100 points) - B = 80 - 89% (80 - 89 points) - C = 70-79% (70-79 points) - D = 60 - 69% (60 - 69 points) - E = 50 - 59% (50 - 59 points) - FX = 0 - 49% (0 - 49 points)	
Results of education: Knowledge:	

- The student can explain and justify the transformations of the terms intercultural, multicultural, and transcultural education.
- The student will be familiar with the concepts of identity, majority and minority identity, educator identity, and minority educator identity.
- The student will be able to analyze current concepts of minority educational policy in Slovakia.
Skills:
- The student will be able to independently search, compare and work with relevant literature sources.
Competencies:
- The student will be able to design a project of an educational activity in order to develop intercultural and minority competences of the pupil.
- The student will be able to design various didactic games that aim at developing intercultural and minority competences of the pupil.

Brief syllabus:

Theoretical approaches to identity from a minority identity perspective.
General theoretical foundations of the concept of identity
Theories of identity research.
State and nation - national, ethnic, majority and minority identity.
Forms of ethnic and national minority education; contemporary analysis of the situation in Slovakia.
Curricular aspects of minority identity.

Literature:

HORVÁTHOVÁ, Kinga, Péter TÓTH, András NÉMETH. 2019. Kisebbségi helyzet, identitás és műveltség [elektronický zdroj]: A szlovákiai magyar pedagógusok társadalmi önmegvalósítása. 1. vyd. Komárno: Univerzita J. Selyeho, 2019. 117 s. [CD-ROM]. ISBN 978-80-8122-309-9.
HUSZÁR, Zsuzsanna, Melinda NAGY, Péter TÓTH, Béla István PUKÁNSZKY a András NÉMETH. 2021. Szlovákiai magyar pedagógusok szakmaképe, kisebbségi és pedagógusi identitásának vizsgálata. In: Engler Ágnes, Bocsi Veronika, Andl Helga (eds.). Új kutatások a neveléstudományokban 2020: Család a nevelés és az oktatás fókuszában. Debrecen: Magyar Tudományos Akadémia Pedagógiai Bizottság, 2021, P. 178-197.
LISZKA, J. 2009. Interetnikus és interkulturális kapcsolatok Dél-Szlovákiában. Komárno : Selye János Egyetem. ISBN 978-80-89234-87-5
LÁZÁR, I., 39 interkulturális játék : Ötlettár tanároknak az interkulturális kompetencia és a csoportdinamika fejlesztéséhez. Budapest : Eötvös Loránd Tudományegyetem. (Bölcsészet- és Művészetpedagógiai Tananyagok, ISSN 2416-1780 ; 9.) ISBN 978-963-284-657-6
NAGY, M., STRÉDL, T., SZARKA, L. 2018. Többség, kisebbség és a tolerancia II. : Kapcsolatok és identitások a számok tükrében. Komárno : Univerzita J. Selyeho. ISBN 978-80-8122-280-1
RÓKA, J., HOCHEL, S. 2009. Interkulturális és nemzetközi kommunikáció a globalizálódó világban. Budapest : Budapesti Kommunikációs és Üzleti Főiskola. ISBN 978-963-7340-74-1

Language, knowledge of which is necessary to complete a course:

hungarian, slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 0

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

Teacher: Dr. habil. PaedDr. Kinga Horváth, PhD., prof. Dr. András Németh, DSc., Dr. habil. PhDr. József Liszka, PhD., Dr. habil. PaedDr. Melinda Nagy, PhD., PaedDr. Patrik Baka, PhD., PaedDr. Beáta Kiss

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ MPP/22	**Name:** Art-pedagogy-psychology, personal development course
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: General conditions for taking the course: - Active participation of the student in the seminars, - Participation of the student in the assigned tasks and involvement in discussions and creative individual and group activities and activities during the seminars. Total student workload: 1 credit = 30 hours - 13 hours for participation in seminars (contact hours), - 7 hours of study of recommended reading, - 10 hours of participation in assignments. Prerequisites for successful completion of the course are as follows: - Active participation of the student in the seminars, participation in debates, individual and group activities within the seminars (50%), - completion of the individual and group assignments (50%).	
Results of education: The aim of the course is to develop the personality of future teachers, their personality traits, communication skills and strengthening self-esteem as necessary attributes for the successful implementation of the educational process. The course introduces students to the methods, techniques and practices of experiential learning, positive psychology and positive education, through which the education of creative, empathetic, tolerant and professionally self-confident and motivated educators is carried out. Knowledge: - The student is proficient in the fundamentals of the art, education, and psychological disciplines system. - The student knows the fundamentals of experiential pedagogy theory and practice. - The student knows the foundations of the theory and practice of positive psychology and positive education. - The student knows the basic methods and techniques of art therapy, music therapy, art therapy, with their possible use in the educational process. Skills: - The student is able to apply selected methods, techniques, procedures of positive psychology and positive education in the educational process.	

- The student is able to use selected methods, techniques, procedures of applied psychology and pedagogical communication in the educational process.
- The student is able to apply selected innovative, progressive methods and techniques for the benefit of comprehensive personality development.
Competencies:
- The student purposefully and systematically pursues the development of his/her own personal and pedagogical core competencies, including through artistic and educational psychological disciplines.
- The student understands the educational process as an opportunity to develop and shape the personality of pupils and teachers, using new knowledge from the field of positive psychology and positive education.
- The student has developed competences for adapting elements, techniques and procedures from the field of artistic-educational and pedagogical-psychological disciplines to his/her own educational activity.

Brief syllabus:
- The place and importance of artistic, pedagogical and psychological disciplines in the development of personality aptitudes and harmonious personality development.
- Art education and its means in favor of developing emotional intelligence and comprehensive development of personality.
- Possibilities of application and application of creative methods and techniques of art education, passive and active art therapy and music therapy in the educational process (e.g. participation in an artistic event or participation in the creation of various projects of artistic orientation).
- Pedagogical-psychological disciplines, methods, techniques and means in favour of prevention and mental health of the pedagogical personality.
- Possibilities of application and application of methods and techniques of activation and motivation in the educational process:
- Creation of a motivational calendar,
- techniques of "rethinking and reframing" from the field of positive psychology,
- altruism, volunteer activities and their influence on the mental and psychological health of the pedagogical personality,
- the possibilities of drama education,
- methods and techniques of "team-building" in favour of building interpersonal relationships.
- Possibilities of practicing and applying methods and techniques for the development of communication skills.
- Possibilities of practicing and applying methods and techniques with relaxation intention and to relieve tension, stress, stage fright.
- Positive pedagogy, positive psychology, experiential pedagogy as innovative and progressive directions of the 21st century and possibilities of their implementation in the educational process.

Literature:
BAGDY, E. 2003. Pszichofitness. ANIMULA, 2003. ISBN 9634080502.
BAGDY, E. 2002. Személyiségfejlesztő módszerek az iskolában. Budapest: Nemzeti Tankönyvkiadó, 2002. ISBN 9631922359.
BAGDY, E. & BISHOP, B. & BÖJTE, CS. & RAMBALA, É. 2011. Hidak egymáshoz: Empátia, kommunikáció, konfliktuskezelés. Budapest: Kulcslyuk Kiadó. ISBN 978-963-89026-5-8.
BAGDY, E., & KÁDÁR, A. KOZMA-VÍZKELETI, D. & PÁL, F. & SZONDY, M. 2014. Bízz magadban!: Önértékelés, önelfogadás, önbecsülés. Budapest: Kulcslyuk Kiadó. ISBN 978-615-5281-18-1.

CINDLEROVÁ I. & A. CSEHIOVÁ & S. DUKIČIN VUČKOVIĆ & G. ENTLOVÁ & Z. GADUŠOVÁ & GY. GÁL & T. GUZIUROVÁ & A. HAŠKOVÁ & L. HOLEČKOVÁ & K. HORVÁTHOVÁ, K. & SZŐKÖL. I. 2016. A pedagógiai kommunikáció. Komárno: Univerzita J. Selyeho. ISBN 978-80-8122-175-0.
HORVÁTH & L. IVANOVIĆ VIBIĆ & T. JOVANOVIC & S. KLIMSZOVÁ & L. KNEZEVIĆ & L. KOVÁCS & K. KRPÁLKOVÁ-KRELOVÁ & I. LOMNICKÝ & E. MALÁ & ZS. MOGYORÓSI & S. O. NINKOVIĆ & L. PAVERA & Ľ. PREDANOCYOVÁ & B. RADULOVIĆ & M. STOJANOVIĆ & E. STRANOVSKÁ & K. SZARKA & I. ŠIMONOVÁ & A. TÓTH-BAKOS & T. TÖRÖK & M. TRNOVÁ & T. VACINOVÁ & I. VIRÁG & E. PETLÁK & M. VÍTEČKOVÁ. 2021. MENTOR TRAINING: Materials and Tasks. Ostrava: Ostravská univerzita. ISBN 978-80-7599-294-9.
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CSEHIOVÁ, A. & KANCZNÉ NAGY, K. Az élménypedagógia helye és szerepe a felsőoktatásban. In: Neveléstudományi kutatások a Kárpát-medencei oktatási térben: A 4. Kárpát-medencei Oktatási Konferencia tanulmánykötete: A 4. Kárpát-medencei Oktatási Konferencia tanulmánykötete. Tóth Péter, Horváth Kinga, Maior Enikő, Bartal Mária, Duchon Jenő. Komárno: Univerzita J. Selyeho, 2019, CD-ROM, p. 362-373. ISBN 978-80-8122-310-5.
CSEHIOVÁ, A. & KANCZNÉ NAGY, K. 2019. Élmény-foglalkozások a Selye János Egyetemen: "MŰvészet-PEdagógia-PSZIchológia". DOI 10.36007/3334.2019.09-17 In: 11. International Conference of J. Selye University : Pedagogical Sections: Pedagogical Sections. Bukor József, Nagy Melinda, Pukánszki Béla István, Csehiová Agáta, Józsa Krisztián, Szőköl István. Komárno: Univerzita J. Selyeho. Online, s. 9-17. ISBN 978-80-8122-333-4.
CSÍKSZENTMIHÁLYI, M. 2001. Flow - Az áramlat = A tökéletes élmény pszichológiája. Budapest: Akadémiai Kiadó. ISBN 963 05 7770 4.
CSÍKSZENTMIHÁLYI, M. 2016. Kreativitás = A flow és a felfedezés avagy a találékonyság pszichológiája. Budapest: Akadémiai Kiadó. (Az elme kerekei, ISSN 2061-2087) ISBN 978 963 05 8746 4.
KANCZNÉ NAGY, K. & CSEHIOVÁ, A. 2020. "Az éménykeresés foka" egy tanárképzésben végzett kutatás eredményei. In: HuCER 2020: Tanulás és innováció a digitális korban: Tanulás és innováció a digitális korban. Kozma Tamás, Juhász Erika, Tóth Péter. Budapest: Magyar Nevelés- és Oktatáskutatók Egyesülete. P. [91]. ISBN 978-615-5657-08-5.
STRÉDL, T. 2017. Terápiák és nevelés: A terápia szocializációs hatása a nevelésben. Komárno: Univerzita J. Selyeho, 2017. 102 s. ISBN 978-80-8122-227-6.
TÓTH-BAKOS, A. Alternatív irányzatok a zenei nevelésben az inklúzió jegyében, avagy, hogyan lehet a zene tényleg mindenkié. In Parlando [online]. 2021, no. 6 [cit. 2021-12-07]. Dostupné na internete: <http://www.parlando.hu/2021/2021-6/Toth-Bakos_Anita.pdf>. ISSN 2063-1979.

TÓTHNÉ LITOVKINA, A. & ZOLCZER, P. 2018. Önfejlesztés és produktivitás: Rövid útmutató személyiségünk és teljesítőképességünk fejlesztéséhez. Komárno: Univerzita J. Selyeho ISBN 978-80-8122-288-7.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 3

a	n
100.0	0.0

Teacher: doc. dr. univ. Agáta Csehiová, PhD., Katalin Kanczné Nagy, PhD., Mgr. Anita Tóth-Bakos, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ MUV/22	**Name:** Methods of learning and research
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The student's total workload: developing and updating a research plan min. 2 pages (20 points), development and adaptation of research methods and instruments (20 points), presentation of research method and instrument min. 2 pages (20 points), testing research methods and tools, summarizing experiences min. 3 pages (40 points). OR to reveal the learning style of the students with a selected questionnaire (min. 15 students), evaluate, identify learning styles and summarize the results in a written paper (min. 3 pages, 40 points). Complete evaluation of the success of the subject: • A = 90 – 100% (100 – 90 points) - excellent, • B = 80 – 89% (89 – 80 points) - very good, • C = 70 – 79% (79 – 70 points) - good, • D = 60 – 69% (69 – 60 points) - satisfactory, • E = 50 – 59% (59 – 50 points) - pass, • FX = 0 – 49% (49 – 0 points) - fail. The student's total workload - Work Schedule: 2 credit = 60 hours: 13 hours (contact hours); 47 hours (preparation of a semester paper).	
Results of education: Educational outcomes: The fulfilment of subject requirements entails the acquisition of the following characteristics; Knowledge: Familiarity with the most important characteristics of scientific research; Familiarity with the qualitative and quantitative methodologies; Familiarity with the methods of collecting research data; Familiarity with the basics of case-studies and online researches; Familiarity with the basics of Academic Writing; Familiarity with the working with scientific literature; Familiarity with the methods and characteristics of scientific literature; Familiarity with methods of reference to scientific literature;	

Familiarity with relationship between learning style, learning environment and learning motivation;
Familiaríty with the basic concepts of learning methodology;
Familiarity with the main characteristics of measuring instruments (used during data collection),
Familiarity with the criteria of validity and reliability;
Familiarity with the requirement of an argumentative interpretation;
Abilities:
The student is able to:
- formulate the purpose of the research,
- compile a research plan on a selected topic,
- develop the principles of scientific literature research,
- evaluate the appropriateness of the applied research instruments and methods.
Competencies:
The student is capable of:
- preparing her/his own research plan,
- formulating hypotheses and/or questions,
- choosing research methods and instruments in order to implement her/his own research plan,
- analizing and refering to the scientific literature,
- summarizing thoughts, based on the processed literature formulation.

Brief syllabus:

The main characteristics of pedagogical research.
Quantitative and qualitative methodologies of pedagogical science.
Formulation of research hypotheses and questions.
Selection and processing of appropriate scientific literature.
Data collection methods (questionnaire, interview, observation, tests).
Case studies, researches on the internet.
The thesis as a publication.
System of scientific references.
Learning styles and learning environment.
Learning didactics.
Correlations of learning and teaching styles.

Literature:

Andragógiai interdiszciplináris kutatásmódszertan / Kálmán Anikó. - 2. vyd. - Budapest : OKKER Oktatási és Kiadói Rt., 2005. - 148 s. - ISBN 963 9228 97 4.
Kutatásmódszertan = Elmélet, gyakorlat, tanulmányok : Oktatási segédlet / Menyhárt József. - 1. vyd. - Nitra-Nyitra : Nyitrai Konstantin Filozófus Egyetem -Univerzita Konštantína Filozofa v Nitre, 2015. - 167 s. - ISBN 978-80-558-0962-5.
A társadalomtudományi kutatás gyakorlata / Earl Babbie ; Gábor Kende. - 6. vyd. - Budapest : Balassi Kiadó, 2008. - 600 s. - ISBN 978-963-506-764-0.
Doing a Successful Research Project : Using Qualitative or Quantitative Methods / Martin Davies, Nathan Hughes. - 2. vyd. - Hampshire : Palgrave Macmillan, 2014. - 278 s. - ISBN 978-1-137-30642-5.
Doing Your Research Project : A Guide for First-time Researchers / Judith Bell, Stephen Waters. - 7. vyd. - London : McGraw-Hill Education, 2018. - 344 s. - ISBN 978-0-335-24338-9.
Metody pedagogického výzkumu : Základy kvantitativního výzkumu / Miroslav Chráska. - 2., akt. vyd. - Praha : Grada, 2016. - 254 s. - ISBN 978-80-247-5326-3.
Egyéni különbségek szerepe a tanulásban : Tanulási stratégiák / Tóth Péter. - 1. vyd. - Budapest : DSGI, 2012. - 143 s. - ISBN 978-963-88946-7-0.

Egyéni különbségek szerepe a tanulásban : A tanulási stílus / Tóth Péter. - 1. vyd. - Budapest : DSGI, 2011. - 222 s. - ISBN 978-963-88946-5-6.-
A hatékony tanulás titka: A hatékony tanítás és tanulás dinamikája / Paul Roeders, Gefferth Éva. - 1. vyd. : Trefort Kiadó, 2007. - 215 s. - ISBN 978-963-446-453-2.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 1

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

Teacher: Dr. habil. Erika Kopp, PhD., prof. Dr. Péter Tóth, PhD., Dr. László Pribék, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ PDI/22	**Name:** Pedagogical diagnostics
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Conditions for passing the subject: The student's final assessment (max. 100 points = 100%) consists of the various results of the work done during the semester and the final test. Conditions for completing the subject: - active participation in lectures, - the student's participation in assigned tasks, analyses and discussions during lectures, - preparation of the student's seminar presentation / preparation of the thesis to be submitted, - successful final exam During the semester, students must complete the following tasks: - During the semester: a) written work in the form of a case study (group work; min 6 pages; max 50 points) or b) making a diagnostic record/observation sheet (group work; min 5 pages; max 50 points) or c) individual educational plan for a student with special educational needs within a given subject (group work; 5 pages; max 50 points). Aspects of evaluation a/ o description of the case from a diagnostic point of view, application of technical terminology (20 points), o content and form (10 points), o the suitability of the strategies proposed for the development of the problematic area(s) (20 points). Optional: written work or lecture/presentation. b/ o content (20 points), o form (10 points), o categorization of fields, technical terminology (20 points). Optional: written work or lecture/presentation. c/ o content (20 points), o form / structure (10 points),	

o suitability of strategies and procedures (20 points).
Optional: written work or lecture/presentation.
- At the end of the semester:
Completed final test (max 50 points)
Aspects of evaluation: based on the scores achieved A = 90-100%; B = 80-89%; C = 70-79%; D = 60-69%; E = 50-59% of the total score.
The student's total workload in terms of the distribution of working hours: 2 credits = 60 working hours:
- Participation in lectures (13 working hours).
- The student's research work in connection with the seminar presentation/thesis to be submitted and its preparation (22 working hours).
- Preparation for the final test (25 working hours).
Final evaluation: The maximum score is 100. The condition for passing the subject is a minimum of 50 points (50%) with the condition that all tasks must be completed with at least 50%. Rating scale: A (90-100%), B (80-89%), C (70-79%), D (60-69%), E (50- 59%).

Results of education:
Results of education:
Knowledge
The student…
- on a theoretical level, can identify the developmental and individual characteristics of the child/ student/youth, as well as the possibilities of self-evaluation,
- can justify the selection criteria of methods and forms of assessment related to the learning and behaviour of the child/student/youth,
- understands the cultural needs and characteristics of different social groups,
- raises awareness of the importance of pedagogical work depending on the diversity of the population,
- able to define the concept of pedagogical diagnostics, its goals and tasks, types and applied methods,
- familiar with computer-based testing procedures.
Abilities
The student…
- will be able to evaluate the educational process and its results, the learning process and its results: able to reasonably implement the pedagogical evaluation,
- has basic practical experience in assessing the current level of development and developmental characteristics of children/students,
- recognize pathological signs in behaviour; able to implement prevention, recognize and solve sociopathological phenomena,
- supports the formation of self-evaluation processes in their students,
- can modify and thereby make the activities more efficient,
- can apply reasonable and effective methods and forms of evaluation, evaluates the child/student free of prejudices and stereotypes,
- can identify developmental and individual characteristics in practice, recognize specific educational needs,
- takes into account the different levels of development of each child/student resulting from socio-cultural differences,
- has basic knowledge related to developmental differences resulting from the specific educational needs of individuals (health or social disadvantage, talent). Able to effectively cooperate with specialists (special pedagogues, psychologists and other specialists) during the educational process, following the principles of inclusive pedagogy, and to take their instructions

and conclusions into account in relation to the education of children/students with special educational needs,
- able to document results and select or compile record/observation sheets,
- is able to apply the methods and tools of pedagogical diagnostics in practice,
- accepts individual differences (accepts differences resulting from developmental and spiritual characteristics), has practical experience in identifying the psychological and social factors of learning and accepts and takes into account the diversity of the class/community,
- is able to develop an individual educational plan for a student with special educational needs and apply it in practice.
Competencies
The student…
- identifies with their profession and institutional standards,
- demonstrates an empathic attitude towards others,
- can adequately evaluate the learning process and its results based on the specified criteria (achievement of the set goals, the impact of learning on the child/student) according to the individual's developmental and individual characteristics,
- can use the skills necessary to establish the correct diagnosis during pedagogical diagnosis in practice and can formulate the prognosis, can set the appropriate development goals,
- uses the principles of assertive communication, communicates with legal representatives and specialists (psychologist, special pedagogue, other specialists) in matters concerning children/ students with special educational needs,
- can effectively communicate and cooperate with the external environment,
- feels responsible for the effective implementation of the educational process supported by pedagogical diagnostics and the application of self-reflection.

Brief syllabus:
Pedagogical diagnostics as a scientific discipline. Its development tendencies and trends in the 20th and 21st centuries in Hungary and abroad.
Concept, object, goals, tasks and basic concepts of pedagogical diagnostics.
Pedagogical diagnostics in the school environment. Its focuses, importance, functions and methodological rules.
Typology of pedagogical diagnostics. The process of diagnosis. Application of pedagogical diagnostics in pedagogical processes.
Diagnostic competences of pedagogical workers.
Pedagogical evaluation. Basic requirements of diagnostic, formative and summative assessment.
Methods and tools of pedagogical diagnostics and their practical application.
Documenting the results of pedagogical diagnostics.
Diagnosing in practice. Social skills. Measuring learning motivation. Diagnosis of cognitive abilities. Computer-based testing.
Integration is inclusion.
Students with special educational needs in the school. Institutional integration of students with special educational needs. Integration, learning and behaviour disorder.
Educational programs for students with special educational needs. Individual educational plan and its practical application.
Cooperation with legal representatives, institutions and professionals.

Literature:
• BORBÉLYOVÁ, D. 2021. A pedagógiai diagnosztika új útjai és kihívásai. Komárno: Selye János Egyetem, Tanárképző kar. 251 o. ISBN 978-80-8122-394-5.

• Koncepcia rozvoja nadaných detí a mládeže v SR. 2007. Bratislava. [online]. Dostupné na internete: https://www.minedu.sk/data/att/933.pdf
• MERTIN, V.-KREJČOVÁ, L. 2016. Metody a postupy poznávání žáka. Pedagogická diagnostika. Wolters Kluwer ČR. 400 s. ISBN 9788075520142.
• Stratégia SR pre mládež na roky 2021-2028. [online]. Dostupné na internete: https://www.minedu.sk/data/files/11043_strategia-slovenskej-republiky-pre-mladez-na-roky-2021-2028.pdf
• STRÉDL, T. 2013. Inkluzív pedagógia avagy a gyógypedagógiáról másképp. 1. kiad. Komárno : Univerzita J. Selyeho, 148 s. ISBN 978-80-8122-089-0.
• VARGÁNÉ, MEZŐ, L. 2009. A pedagógiai dignosztika és az együttnevelést segítő szakmaközi együttműködés lehetőségei. [online]. Dostupné na internete: https://ofi.oh.gov.hu/vargane-mezo-lilla-pedagogiai-diagnosztika-es-az-egyuttnevelest-segito-szakmakozi-egyuttmukodes
• VAŠEK, Š. 2004. Špeciálno- pedagogická diagnostika. 4. vyd. Bratislava: Sapientia s.r.o, 2004. 168 s. ISBN 80-969112-0-1.
• ZELINKOVÁ, O. 2009. Poruchy učení : dyslexie, dysgrafie, dysortografie, dyskalkulie, dyspraxie, ADHD. 1. vyd. Praha : Portál, 263 s. ISBN 978-80-7367-514-1.
• ZELINKOVÁ, O. 2011. Pedagogická diagnostika a individuální vzdělávací program. Praha: Portál. 208 s. ISBN 978-80-2620-044-4.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 1

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

Teacher: prof. Dr. Krisztián Józsa, DSc., Dr. habil. Erika Kopp, PhD., Mgr. Katarína Szarka, PhD., PaedDr. Diana Borbélyová, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ PHO/22	**Name:** Pedagogical evaluation
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Final student assessment (max. 100 points = 100%): independent written work and final test. Prerequisites: - Active participation of the student in lectures, - active participation of the student in the course of the course, - successful completion of the final test. During the semester the student must prepare: - written thesis: The student has to construct a knowledge test in the context of his/her own approbation course. The paper should include: 1.) a knowledge test with a maximum time limit of 45 minutes, 2.) the correct answer key for each item, 3.) instructions for measurement (when, under what circumstances pupils can write the test, what aids they can use, etc.), 4.) A brief analysis of the curriculum (grade level; specific part of the curriculum covered etc.). Assessment criteria: - Form requirement (10 points), - content requirement, methodological correctness (20 points), - quality of instructions and key (20 points). Assessment criteria on the basis of the scores: to achieve an A grade 90-100% (50-46 points); for grade B, 80-89% (45-41 points); for grade C, 70-79% (40-36 points); for grade D, 60-69% (35-31 points); and for grade E 50-59% (30-25 points) of the total number of points. 0-24 points = FX. - Pass the final test - at the end of the semester (max 50 points). The test serves to verify the student's theoretical knowledge. Grading criteria based on points: to achieve grade A, you need to get 90-100% (50-46 points); for grade B, 80-89% (45-41 points); for grade C, 70-79% (40-36 points); for grade D, 60-69% (35-31 points) and for grade E, 50-59% (30-25 points) of the total points. 0-24 points = FX. Total student workload - distribution of work hours: 2 credits = 60 work hours: - Lecture attendance: total for the semester (13 hours).	

- Student's written work and its elaboration - designing a knowledge test (22 working hours).
- Preparation for the final test (25 working hours).
The maximum number of points is 100. The condition for passing the course is the achievement of at least 50 points, i.e. 50% of the total, with the condition that at least half of the points (50%) must be obtained in each assignment. To achieve a grade of A, 90-100% (90-100 points); for a grade of B, 80-89% (80-89 points); for a grade of C, 70-79% (70-79 points); for a grade of D, 60-69% (60-69 points); and for a grade of E, 50-59% (50-59 points) of the total number of points. 49-0 points = FX.

Results of education:
Knowledge
The student
• has an in-depth knowledge of the methodological foundations of assessment theory and practice, and of the theory and practice of student assessment,
• understand the importance of assessment and feedback in learning,
• can give an overview of current trends in assessment in education,
• has knowledge of the purpose and methods of diagnostic, formative and summative assessment,
• has knowledge of methodological guidelines for assessing and grading students,
• has knowledge of the similarities and differences between skills and knowledge tests,
• knows the principles of writing tasks,
• knows of the principles for the preparation of assesment and measurement guides,
• knows the principles of testing knowledge.
Skills:
The student
• will be able to evaluate the teaching-learning process and its outcomes, the learning process and its outcomes: will be able to carry out effective pedagogical evaluation,
• has basic practical experience in assessing learners' current levels of development and developmental characteristics,
• is able to apply different methods and forms of assessment, to assess the learner without prejudice and stereotypes,
• can identify developmental and individual characteristics in practice,
• is able to apply in practice the pedagogical assessment tools,
• is able to test subject knowledge.
Competences:
The student
• identifies with his/her profession and with institutional standards,
• demonstrates empathy towards others,
• is able to evaluate the learning process and its results in relation to the developmental and individual characteristics of the person, on the basis of the criteria set (achievement of objectives, impact of learning on the learner),
• adopt a non-judgemental and non-stereotypical approach to pedagogical assessment,
• has basic competences in the field of educational assessment.
Topics:
1. Student assessment. The impact of assessment on student performance and motivation.
2. Types, methods and tools of assessment in the teaching-learning process.
3. Diagnostic, formative and summative tests.
4. Assessment in relation to norms and criteria.
5. Performance indicators of tests, objectivity, reliability, validity.Assessment for learning in the classroom.
6. Skills and ability tests.

7. Principles of constructing and using proficiency tests.
8. Exploring content and requirements, constructing taxonomies.
9. Task pathology, types of tasks for knowledge assessment.
10. Practice in preparing knowledge assessment tasks.
11. Measurement and evaluation guides, revision key.
12. Interpretation of measurement results, use in school.

Brief syllabus:

Student assessment. The impact of assessment on student performance and motivation.
Types, methods and tools of assessment in the teaching-learning process.
Diagnostic, formative and summative tests.
Assessment in relation to norms and criteria.
Performance indicators of tests, objectivity, reliability, validity.Assessment for learning in the classroom.
Skills and ability tests.
Principles of constructing and using proficiency tests.
Exploring content and requirements, constructing taxonomies.
Task pathology, types of tasks for knowledge assessment.
Practice in preparing knowledge assessment tasks.
Measurement and evaluation guides, revision key.
Interpretation of measurement results, use in school.

Literature:

BORBÉLYOVÁ, D. 2021. A pedagógiai diagnosztika új útjai és kihívásai. Komárno: Selye János Egyetem, Tanárképző kar. 251 o. ISBN 978-80-8122-394-5.
CSÍKOS, Cs. & B. NÉMETH, M. 1998. A tesztekkel mérhető tudás. In B. Csapó (Ed.), Az iskolai tudás (pp. 83–114). Budapest: Osiris Kiadó. ISBN 963 389 246 5. online. Dostupné na internete: http://publicatio.bibl.u-szeged.hu/11931/1/CsBeno_Iskolai_tudas_2002.pdf
CSAPÓ, B. et. al. (szerk.). 2015. A matematikai tudás online diagnosztikus értékelésének tartalmi keretei. Budapest: Oktatáskutató és Fejlesztő Intézet. online. Dostupné na internete: http://pedagogus.edia.hu/?q=content/matematikai-tud%C3%A1s-online-diagnosztikus-%C3%A9rt%C3%A9kel%C3%A9s%C3%A9nek-tartalmi-keretei
CSAPÓ, B. et. al. (szerk.). 2015. A természettudományi tudás online diagnosztikus értékelésének tartalmi keretei. Budapest: Oktatáskutató és Fejlesztő Intézet, Budapest. online. Dostupné na internete: http://pedagogus.edia.hu/?q=content/term%C3%A9szettudom%C3%A1nyi-tud%C3%A1s-online-diagnosztikus-%C3%A9rt%C3%A9kel%C3%A9s%C3%A9nek-tartalmi-keretei
D. MOLNÁR, É., MOLNÁR, E. K. & JÓZSA, K. 2012. Az olvasásvizsgálatok eredményei. In: Csapó Benő (szerk.): Mérlegen a magyar iskola.Budapest: Nemzeti Tankönyvkiadó. 17–81. online. Dostupné na internete: http://pedagogus.edia.hu/sites/default/files/merlegen_a_magyar_iskola.pdf
JÓZSA, K. 2012. A tanulás affektív tényezői. In: Csapó Benő (szerk.): Mérlegen a magyar iskola. Nemzeti Tankönyvkiadó, Budapest. 367–406. online. Dostupné na internete: http://www.staff.u-szeged.hu/~fejesj/pdf/Jozsa-Fejes_2012_Affektiv_tenyezok.pdf
JÓZSA, K. 2012. Részletes tartalmi keretek az olvasás diagnosztikus értékeléséhez. In: Csapó Benő és Csépe Valéria (szerk.): Tartalmi keretek az olvasás diagnosztikus értékeléséhez. Budapest: Nemzeti Tankönyvkiadó. 219–308. online. Dostupné na internete: http://www.edu.u-szeged.hu/~csapo/publ/Olvasas_tartalmi_keretek.pdf

Language, knowledge of which is necessary to complete a course:

hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: prof. Dr. Krisztián Józsa, DSc., Dr. habil. Erika Kopp, PhD., Mgr. Katarína Szarka, PhD., PaedDr. Diana Borbélyová, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ PPX1/22	**Name:** Introductory pedagogical practice
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The conditions for the completion of the course are defined by the current dean's guideline of the Faculty of Teacher Education of the SJU TKK Komárom: the Principles of Pedagogical Practice of the Selye János University. The student is obliged to follow the instructions for the subject Pedagogical Practice 1 - PPX 1 of this document and to act according to them. The conditions for completing the course: - active participation of the student in the pedagogical practice within the given time interval in accordance with the guidelines, - cooperation of the student in the performance of the tasks, active participation in the analysis and discussion during the pedagogical exercise, - submission of a completed report, stamped and signed by the institution, certifying participation in the pedagogical training (PPX 1), - Completion of a portfolio (reflection on the induction training) - assessment of the quality of the portfolio/reflection (max. 50 points): • content: 35 points, • format: 15 points. Total workload of the student: 1 credit = 30 working hours •5 contact hours in the form of attendance at the institution; 5 hours of analysis; 10 hours preparation of the portfolio/reflection. Successful completion of the course requires: 1.) the submission of a completed and signed/ stamped report on the pedagogical practice (PPX 1 2.) obtaining at least 50% of the maximum number of points (50 points) for the course. Final assessment: - passed = 50 - 100% (25 - 50 points) - not passed = 49 - 0% (0 - 24 points)	
Results of education: Knowledge: - the student is familiar with the school's legal documents. - The student knows the pedagogical documentation of the school. Skills: - be able to find their way around school legislation and search for relevant information,	

- be able to find their way around the school's pedagogical documentation.
Competensies:
- the student is able to independently observe and analyse the internal and external space of the school in the context of the implementation of educational processes.

Brief syllabus:
The pedagogical practice in the training schools/practice school facilities, within which the student will acquire knowledge on the following topics: school legislation, pedagogical documentation, teaching methods, curricula, curriculum, thematic plans, teaching process, preparation for the classroom, possibilities for active work with students, evaluation criteria.
Preparing a portfolio/reflection.

Literature:
CINDLEROVÁ, I,- CSEHIOVÁ, A. et al. 2021. Mentor Training: Materials and Tasks. 1. vyd. Ostrava: Ostravská univerzita, 268 s. ISBN 978-80-7599-294-9.
HORVÁTHOVÁ, K. Oktatásmenedzsment. Komárno : UJS, 2015. 200 s. ISBN 978-80-8122-136-1.
PRŮCHA, J. Moderní pedagogika. Praha Portál, 2009. 481 s. ISBN 978-80-7367-503-5.
SIROTOVÁ, M. 2015. Pedagogická prax v pregraduálnej príprave učiteľov. Trnava : UCM, 2015. 127 s. ISBN 978-80-8105-648-2.
Zákon č. 245/2008 z 22. mája 2008 o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov.
Štátne vzdelávacie programy
Aktuálna Smernica Dekana PF UJS: Zásady realizácie pedagogickej praxe na Pedagogickej fakulte Univerzity J. Selyeho.

Language, knowledge of which is necessary to complete a course:
hungarian , slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 88

a	n
88.64	11.36

Teacher: PaedDr. Tamás Török, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ PPX2/22	**Name:** Pedagogical practice 2
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The final assessment is a portfolio based on the teaching aids developed during the pedagogical practice. The conditions for the completion of the course are regulated by the Dean's Regulation on the Principles of Pedagogical Practice at the SJE CPTS. The student is obliged to follow the sections of this document concerning the pedagogical practice of tutorials (PPX2). Mandatory parts of the portfolio: - A (completed) protocol certifying the completion of the pedagogical training - Observed lessons analysis and completed observation forms - Other documents and annexes of the pedagogical practice. Subject grade: A 100-90%, B 89-80%, C 79-70%, D 69-60%, E 59-50%. An Fx grade may be given if the student achieves less than 50% of the total score. Student's workload: 1 credit = 25 hours (10 hours of pedagogical practice: 5 hours of observation, 5 hours of analysis and 15 hours of preparation: preparation for the pedagogical practice - consultation with the trainer, preparation for the lesson, preparation of the portfolio and documentation)	
Results of education: Oktatási kimenetek: Knowledge: - The student is able to observe and analyse activities in upper secondary and secondary school. - The student is able to evaluate professionally the observed upper secondary and secondary school activities and activities. - The student is able to consult school documents. - The student is familiar with the staff structure and material resources of the school. - The student is aware of the specific activities of the teacher during the lessons. - The student knows and understands the environment, culture and organisation of primary and secondary schools. Skills: - The ability to identify the different manifestations of the structural elements of personality, the psychological processes of the learner in the process of teaching and in social interactions. - Knowledge of the specific activities of the teacher during the day, in the classroom and in the teaching of subjects related to his/her field of specialisation in primary and secondary schools.	

- Identify the teaching objectives set by the teacher, the procedures used to achieve them and the extent to which they are achieved.
- Can identify the teaching methods used in the lesson.
- Describes the didactic aids, communication technologies and tools used in the teaching process, as well as the possibilities of using computers, interactive whiteboards, the Internet, special educational programmes and software, dynamic systems, interactive learning materials and portals in the teaching of subjects in the field of the teacher's specialisation.
- Describe the processes of student assessment in the teaching process.
- Identify the teaching and communication style and professional skills of the teacher.
- Ability to process, evaluate and reflect on the results of observations in the context of educational theory.
- The learner can recognise his/her own level of competence.
- The learner is able to identify common professional problems, to search for, formulate and solve them from a theoretical and practical background (using practical procedures in practice).
- The ability to identify gifted pupils, pupils with difficulties or special educational needs, disadvantaged pupils, pupils with multiple disadvantages and pupils with special educational needs.

Competencies:
- It takes a position on observed phenomena based on previous theoretical knowledge.
- Understands the relationship between teaching principles, consequences and learning effectiveness.
- Reflects on own pedagogical skills.
- The student will be able to develop self-awareness of the teaching profession in a targeted way.
- The student will be able to create an atmosphere of trust, helpfulness, encouragement, attentiveness, acceptance, openness, recognition and management of the working style of others.

Brief syllabus:

Observation and evaluation of the external and internal environment of a primary and secondary school in practice.
Learning about and working with the pedagogical documentation of the class and the school.
Observation of the creation of conditions, implementation and evaluation of lessons in upper primary and secondary schools.
To carry out a professional analysis of the lessons observed in collaboration with the trainee teacher.
Documenting the process and results of each lesson observed.
Preparation of a portfolio of the lessons observed, with all its components, according to predefined criteria by the head of the teaching practice, using autonomy and alternativity, based on current trends in didactics.

Literature:

Štátny vzdelávací program pre 2. stupeň základnej školy v Slovenskej republike ISCED 2 – nižšie sekundárne vzdelávanie. https://www.statpedu.sk/files/articles/dokumenty/statny-vzdelavaci-program/isced2_spu_uprava.pdf
Štátny vzdelávací program pre gymnázia v Slovenskej republike ISCED 3A – Vyššie sekundárne vzdelávanie. https://www.statpedu.sk/files/articles/dokumenty/statny-vzdelavaci-program/isced3_spu_uprava.pdf
Zákon č. 245/2008 Z. z. – Zákon o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov. Bratislava : MŠ SR, 2008 (respektíve aktuálny školský zákon).
Aktuálny vnútorný predpis UJS: Zásady realizácie pedagogickej praxe na Pedagogickej fakulte UJS

Gadušová, Z. a kol.: Mentor Training : Ostrava : Ostravská univerzita, 2021. - online, 268 s. - ISBN 978-80-7599-294-9.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 1

a	n
100.0	0.0

Teacher: PaedDr. Tamás Török, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ PPX3/22	**Name:** Pedagogical practice 3
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 5.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The final assessment is a portfolio based on the teaching aids developed during the pedagogical practice. The conditions for the completion of the course are regulated by the Dean's Regulation on the Principles of Pedagogical Practice at the SJE CPTS. The student is obliged to follow the sections of this document concerning the pedagogical practice of tutorials (PPX3). Mandatory parts of the portfolio: - A (completed) protocol certifying the completion of the pedagogical training - Observed lessons analysis and completed observation forms - Other documents and annexes of the pedagogical practice. Subject grade: A 100-90%, B 89-80%, C 79-70%, D 69-60%, E 59-50%. An Fx grade may be given if the student achieves less than 50% of the total score. Student's workload: 1 credit = 25 hours (10 hours of pedagogical practice: 5 hours of observation, 5 hours of analysis and 15 hours of preparation: preparation for the pedagogical practice - consultation with the trainer, preparation for the lesson, preparation of the portfolio and documentation)	
Results of education: Knowledge: - The student is able to observe and analyse activities in upper secondary and secondary school. - The student is able to evaluate professionally the observed upper secondary and secondary school activities and activities. - The student is able to consult school documents. - The student is familiar with the staff structure and material resources of the school. - The student is aware of the specific activities of the teacher during the lessons. - The student knows and understands the environment, culture and organisation of primary and secondary schools. Skills: - The ability to identify the different manifestations of the structural elements of personality, the psychological processes of the learner in the process of teaching and in social interactions. - Knowledge of the specific activities of the teacher during the day, in the classroom and in the teaching of subjects related to his/her field of specialisation in primary and secondary schools.	

- Identify the teaching objectives set by the teacher, the procedures used to achieve them and the extent to which they are achieved.
- Can identify the teaching methods used in the lesson.
- Describes the didactic aids, communication technologies and tools used in the teaching process, as well as the possibilities of using computers, interactive whiteboards, the Internet, special educational programmes and software, dynamic systems, interactive learning materials and portals in the teaching of subjects in the field of the teacher's specialisation.
- Describe the processes of student assessment in the teaching process.
- Identify the teaching and communication style and professional skills of the teacher.
- Ability to process, evaluate and reflect on the results of observations in the context of educational theory.
- The learner can recognise his/her own level of competence.
- The learner is able to identify common professional problems, to search for, formulate and solve them from a theoretical and practical background (using practical procedures in practice).
- The ability to identify gifted pupils, pupils with difficulties or special educational needs, disadvantaged pupils, pupils with multiple disadvantages and pupils with special educational needs.

Competencies:
- It takes a position on observed phenomena based on previous theoretical knowledge.
- Understands the relationship between teaching principles, consequences and learning effectiveness.
- Reflects on own pedagogical skills.
- The student will be able to develop self-awareness of the teaching profession in a targeted way.
- The student will be able to create an atmosphere of trust, helpfulness, encouragement, attentiveness, acceptance, openness, recognition and management of the working style of others.

Brief syllabus:

Observation and evaluation of the external and internal environment of a primary and secondary school in practice.
Learning about and working with the pedagogical documentation of the class and the school.
Observation of the creation of conditions, implementation and evaluation of lessons in upper primary and secondary schools.
To carry out a professional analysis of the lessons observed in collaboration with the trainee teacher.
Documenting the process and results of each lesson observed.
Preparation of a portfolio of the lessons observed, with all its components, according to predefined criteria by the head of the teaching practice, using autonomy and alternativity, based on current trends in didactics.

Literature:

Štátny vzdelávací program pre 2. stupeň základnej školy v Slovenskej republike ISCED 2 – nižšie sekundárne vzdelávanie. https://www.statpedu.sk/files/articles/dokumenty/statny-vzdelavaci-program/isced2_spu_uprava.pdf
Štátny vzdelávací program pre gymnázia v Slovenskej republike ISCED 3A – Vyššie sekundárne vzdelávanie. https://www.statpedu.sk/files/articles/dokumenty/statny-vzdelavaci-program/isced3_spu_uprava.pdf
Zákon č. 245/2008 Z. z. – Zákon o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov. Bratislava : MŠ SR, 2008 (respektíve aktuálny školský zákon).
Aktuálny vnútorný predpis UJS: Zásady realizácie pedagogickej praxe na Pedagogickej fakulte UJS

Gadušová, Z. a kol.: Mentor Training : Ostrava : Ostravská univerzita, 2021. - online, 268 s. - ISBN 978-80-7599-294-9.

Language, knowledge of which is necessary to complete a course:
hungarian ,slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 1

a	n
100.0	0.0

Teacher: PaedDr. Tamás Török, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ PRP/22	**Name:** Profession of teaching
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The student's final grade (max. 100 points = 100%) consists of the results of several types of work carried out during the semester and a final didactic test. - Student participation in assignments and involvement in analysis and discussions during lectures, - an essay in which the student analyses relevant professional, scientific literature or an article (50 points), or a project proposal for an educational activity aimed at developing the pedagogical competences of the teacher (50 points) - a final didactic test (50 points). Criteria for the evaluation of the essay: - presentation of a literature review (10 points), - analysis and evaluation (20 points), - drawing conclusions and formulating proposals (10 points), - elaboration (10 points). Criteria for evaluation of the educational activity project proposal: - Content (20 points) - originality (10 points) - formality (10 points) - presentation of the literature review (10 points) Total student workload: 2 credits = 60 hours - 26 hours attendance at lectures (contact hours); 17 hours self-study; 17 hours preparation of term papers. The maximum number of points is 100. 100 points are required to pass the course, i.e. 50% of the total, with the condition that at least half of the points (50%) must be obtained in each assignment. To achieve a grade A, you must obtain 90-100% (90-100 points); for grade B, 80-89% (80-89 points); for grade C, 70-79% (70-79 points); for grade D, 60-69% (60-69 points); and for grade E, 50-59% (59-50 points) of the total number of points.	
Results of education: Knowledge - The student knows the most important exploratory methods to reveal the social situation of groups and students,	

- The student knows the pedagogical methods that promote community formation and development,
- the student knows pedagogical theories about the role of the teacher, expectations related to the role of the teacher,
- the student has knowledge of the role of reflective thinking, opportunities for further education,
- the student is informed in the field of educational research,
- the student knows the main ethical standards of his/her profession.

Skills

The student will be able to:
- Independently search, compare and use relevant literature sources,
- define strategies appropriate to the goals of education,
- select organizational forms and organize an environment conducive to effective learning,
- independently, professionally analyse different learning situations,
- reflectively interpret, analyse and evaluate their pedagogical experiences and opinions.

Competencies:

Student:
- Can form an independent opinion, reflect on himself/herself as a future teacher.
- Is able to develop own practices to achieve the set goals,
- behaves empathetically towards different social groups,
- takes responsibility for the mission of his/her institution,
- feels responsible for the effective solution of each problem.

Brief syllabus:

1. Professionalization, profession: professional theories; historical and sociological interpretation of professionalization.
2. History and interpretation of the development and changes in the teaching profession.
3. History of the teaching profession and teacher training. Paradigms of teacher education. Characteristics of the teaching profession.
4. Pedagogical research; the concept and results of pedeutology.
5. Career suitability, personality of the teacher.
6. The role of the teacher in the teaching-learning process. Styles and strategies of learning and teaching (when, how and why it is necessary to innovate them),
7. Theories and career models of professional development. A professionally informed interpretation of the individual, organisational and systemic relationship between continuous professional development. Innovation and collaboration in the teaching career (a two-factor model of retention in the profession)
8. A model of the educator's career. Individual career image and reflection.
9. Reflexivity in the teacher's work. The reflective teacher.
10. Strengthening teachers' professional awareness, support for their work, their career opportunities.
11. Teacher's code of ethics.
12. Difficulties of the teaching profession: role conflicts, prevention of burnout syndrome.
13. Competences of beginning teachers, possibilities of their development.
14. Professional support for beginning teachers. Mentoring opportunities in public education and higher education.

Literature:

Czető Krisztina: Eredményesség és szakmai fejlődés. A tanári eredményesség modelljei
és az eredményes szakmai fejlődést és tanulást támogató tanulási helyzetek megközelítése.

Neveléstudomány, 2020 (8) 1. sz. 80-93. http://nevelestudomany.elte.hu/downloads/2020/nevelestudomany_2020_1_83-97.pdf [2022. 02. 05.]
Falus Iván (szerk.): Tanári pályaalkalmasság – kompetenciák – sztenderdek. Nemzetközi áttekintés. Eszterházy Károly Főiskola, Eger, 2011. http://epednet.ektf.hu/eredmenyek/tanari_palyaalkalmassag_kompetenciak_sztenderdek.pdf ISBN 978-963-9894-86-0 [2022. 02. 05.]
Hercz Mária (szerk.): Pályakezdő óvodapedagógusok túlélőkészlete. http://www.jgypk.hu/mentorhalo/tananyag/Plyakezd_vodapedaggusok_tllkszleteV3/index.html [2022. 02. 05.]
Ingvarson, L. (2002): Development of a national standards framework for the teaching profession. https://research.acer.edu.au/cgi/viewcontent.cgi?article=1007&context=teaching_standards [2022. 02. 05.]
N. Tóth Ágnes: Az inkluzív pedagógus. In: A pedagógia adósságai. Savaria University Press. Szombathely. 2015.
https://www.researchgate.net/profile/Agnes-N-Toth/publication/316432178_Az_inkluziv_pedagogus/links/58fdc181a6fdccae60a1e71d/Az-inkluziv-pedagogus.pdf [2022. 02. 05.]
Németh András: Magyar pedagógusképzés és a pedagógus szakmai tudásformák I. 1775 –1945. nemzeti fejlődési trendek, nemzetközi recepciós hatások. ELTE Eötvös Kiadó, Budapest, 2012. ISBN: 978 963 33120934
Pukánszki Béla István: Iskola és pedagógusképzés. Gondolat, Budapest, 2013. ISBN: 9789636932282
Sági Matild (szerk.): A pedagógushivatás megerősítésének néhány aspektusa. OFI, Budapest, 2015. https://ofi.oh.gov.hu/sites/default/files/attachments/1506257_a_pedagogushivatas_megerositesenek_nehany_aspektusa_beliv.pdf [2022. 02. 05.]
Szivák Judit: Reflektív elméletek, reflektív gyakorlatok. ELTE, Budapest, 2014. ISBN 978-963-284-482-4.
https://www.eltereader.hu/media/2016/05/Szivak-_READER.pdf [2022. 02. 05.]
Vámos Ágnes (szerk.): Tanuló pedagógusok és az iskola szakmai tőkéje. Eötvös Kiadó, ELTE, Budapest, 2016. https://www.eltereader.hu/media/2017/05/Vamos_Agnes_Tanulo_pedagogusok_READER.pdf ISBN 978-963-284-805-1 [2022. 02. 05.]
Z. Gadusova (szerk.): Mentor training. Materials and tasks. The publication is supported by Erasmus+ project No. 2020-1-SK01-KA201-078250 Mentor Training (MENTRA). ISBN 978-80-7599-294-9.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 15

A	B	C	D	E	FX
73.33	0.0	20.0	0.0	6.67	0.0

Teacher: prof. Dr. Attila Józsefné Katalin Ambrus, DSc., prof. Dr. András Németh, DSc., Gyöngyi Gál, PhD., Katalin Kanczné Nagy, PhD., Dr. habil. PaedDr. Kinga Horváth, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ RAS/22	**Name:** Family and school
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Prerequisites for passing the course are: active participation of the student in lectures and submission of a written thesis during the semester. The assessment of the course will be based on the points obtained in the following distribution: maximum 10 points for participation maximum 30 points for solving seminar problems during class and maximum 60 points for the submitted work. A 100-90%, B 89-80%, C 79-70%, D 69-60%, E 59-50%. FX 50% or less. Total student load: 1 credit = 30 hours (13 hours of active participation in lectures; 17 hours of independent study and preparation of written work).	
Results of education: Knowledge: - The student knows the details of school and family education. - The student knows the possibilities and interactions with parents - the student knows and current methods for problem solving and conflict management. - The student knows current social trends in social and family difficulties - the student knows and social inequalities and the problems they cause Abilities: - The student is able to independently search, compare and use relevant literary sources, - The student is able to navigate between legal documents and search for relevant legislation, - the student is able to manage a small social group, - the student is able to collaborate with partner institutions of his/her school. - The student is able to embrace family values. Competencies: - The student is able to use his/her theoretical knowledge in the context of the family and the school, - the student is able to develop his/her own procedures to achieve his/her goals, - the student is compassionate towards different social groups, - the student is able to critically evaluate legislative documents related to his/her work, - the student takes responsibility for solving problems related to his/her work.	
Brief syllabus:	

The concept and history of the family.
Family form and family functions.
The place, role and absence of members in the family.
Evolution of family life and changes in family life.
Paranormal crises and the under-functioning family.
The family and the school.
Methods of getting to know the family.
Opportunities for cooperation.
Educational methods and teacher communication.
Social deficiencies and school success.
Research on family inequalities.
The education of family life.
Strengthening the relationship between school and family. Good practices.

Literature:

Balogh László–Bolló Csaba–Dávid Imre–Tóth László–Tóth Tamás: A pedagógusok, szülők együttműködése és a kollégiumok szerepe a tehetségfejlesztésben. Magyar Tehetségsegítő Szervezetek Szövetsége, 2014.ISSN 2062-5936
https://tehetseg.hu/sites/default/files/konyvek/geniusz_31_net.pdf
Cs. F. Nemes Márta: Családpedagógiai módszertan. Családi Nevelésért Alapítvány, Bp., 2001-2002.
Forward, S. (2000): Mérgező szülők. Budapest, Háttér Kiadó, 346 p.
Hegedűs Judit (szerk.): Család, gyermek, társadalom – A gyakorlati pedagógia néhány alapkérdése sorozat (5. kötet) ELTE, Budapest, 2006.
http://gepeskonyv.btk.elte.hu/adatok/Pedagogia/84N%E1dasi/Nyomtat%E1sra/pdf/Csal%E1d,%20gyermek,%20t%E1rsadalom.pdf
Kováts-Németh Mária – Muhi Béla – Szijártó István (szerk.) A család és szerepe a tehetséggondozásban. Ziegler-nyomda, Keszthely, 2013.
Németh András (2004): Az európai család változásai. in: Pukánszky Béla-Németh András: A pedagógia problématörténete. Gondolat Kudapest, 241-259.o ISBN: 963 956 7183
Podráczky J. szerk. 2012. Szövetségben. Tanulmányok a család és az intézményes nevelés kapcsolatáról. Budapest, ELTE Eötvös Kiadó.
Pukánszky Béla: A gyermekkor története. Műszaki Kiadó, Budapest, 2001.
Ranschburg Jenő (2004): Gepárd–kölykök. Urbis Kiadó, Budapest,
5–137. ISBN: 963 929 1595
Szabó Éva (2008). Szeretettel és szigorral. Az iskolai nevelés problémái a szülők és a tanárok szemszögéből. Akadémiai Kiadó. ISBN:9779630583771
UTASI Ágnes: A bizalom hálója. Mikro-társadalmi kapcsolatok, szolidaritás. Budapest, 2002. Új Mandátum Kiadó 155 p.
Vajda Zsuzsa (2005): A család funkciói. in: Vajda Zsuzsanna–Kósa Éva: Neveléslélektan. Osiris Kiadó, Budapest, 171–179.ISBN: 963389 7289

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 34

A	B	C	D	E	FX
52.94	17.65	2.94	8.82	0.0	17.65

Teacher: prof. Dr. Béla István Pukánszky, DSc., Gyöngyi Gál, PhD., prof. Dr. András Németh, DSc.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ RMK/22	**Name:** Regional and minority culture

Types, range and methods of educational activities:
Form of study: Lecture
Recommended extent of course (in hours):
Per week: 1 **For the study period:** 13
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 2.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
General conditions for taking the course:
- Active participation of the student in lectures,
- Participation of the student in the assignments and participation in the analysis and discussions during the lectures,
- an essay in which the student analyses relevant professional, scientific literature or an article (100 points), or a project proposal for an educational activity aimed at developing the student's intercultural and minority competences (100 points)

Essay evaluation criteria:
- Presentation of a literature review (20 points),
- analysis and evaluation (40 points),
- drawing conclusions and formulating suggestions (20 points),
- elaboration (20 points).

Criteria for evaluation of the educational activity project proposal:
- Content (40 points),
- originality (20 points),
- formality (20 points),
- presentation of the literature review (20 points).

Total student workload: 2 credit = 60 hours
- 13 hours of lecture attendance; 20 hours of self-study; 27 hours of term paper preparation.

The prerequisite for successful completion of the course is obtaining at least 50% of the maximum course grade.
Overall course pass mark:
- A = 90 - 100% (90 - 100 points)
- B = 80 - 89% (80 - 89 points)
- C = 70 - 79% (70 - 79 points)
- D = 60 - 69% (60 - 69 points)
- E = 50 - 59% (50 - 59 points)
- FX = 0 - 49% (0 - 49 points)

Results of education:
Knowledge:

- The student can explain and justify the transformations of the terms intercultural, multicultural, and transcultural education.
- The student will be familiar with the concepts of identity, majority and minority identity, educator identity, and minority educator identity.
- The student will understand the cultural legacy of generations, and societal value systems.
- The student will be able to analyze current concepts of minority educational policy in Slovakia.
Skills:
- The student will be able to independently search, compare and work with relevant literary sources.
Competencies:
- The student will be able to design a project of an educational activity in order to develop intercultural and minority competences of the pupil.
- The student has internalized social values.
- The student has respect for ancestral traditions.
- The student is able to create various didactic games aimed at developing the student's intercultural and minority competences.

Brief syllabus:

Theoretical approaches to identity from a minority identity perspective.
General theoretical foundations of the concept of identity.
Theories of identity research.
State and nation - national, ethnic, majority and minority identity.
Cultural and social values with regard to minorities.
Forms of education of ethnic and national minorities; current analysis of the situation in Slovakia.
Curricular aspects of minority identity.

Literature:

HORVÁTHOVÁ, Kinga, Péter TÓTH, András NÉMETH. 2019. Kisebbségi helyzet, identitás és műveltség [elektronický zdroj]: A szlovákiai magyar pedagógusok társadalmi önmegvalósítása. 1. vyd. Komárno: Univerzita J. Selyeho, 2019. 117 s. [CD-ROM]. ISBN 978-80-8122-309-9.
HUSZÁR, Zsuzsanna, Melinda NAGY, Péter TÓTH, Béla István PUKÁNSZKY a András NÉMETH. 2021. Szlovákiai magyar pedagógusok szakmaképe, kisebbségi és pedagógusi identitásának vizsgálata. In: Engler Ágnes, Bocsi Veronika, Andl Helga (eds.). Új kutatások a neveléstudományokban 2020: Család a nevelés és az oktatás fókuszában. Debrecen: Magyar Tudományos Akadémia Pedagógiai Bizottság, 2021, P. 178-197.
LISZKA, J. 2009. Interetnikus és interkulturális kapcsolatok Dél-Szlovákiában. Komárno : Selye János Egyetem. ISBN 978-80-89234-87-5
LÁZÁR, I., 39 interkulturális játék : Ötlettár tanároknak az interkulturális kompetencia és a csoportdinamika fejlesztéséhez. Budapest : Eötvös Loránd Tudományegyetem. (Bölcsészet- és Művészetpedagógiai Tananyagok, ISSN 2416-1780 ; 9.) ISBN 978-963-284-657-6
NAGY, M., STRÉDL, T., SZARKA, L. 2018. Többség, kisebbség és a tolerancia II. : Kapcsolatok és identitások a számok tükrében. Komárno : Univerzita J. Selyeho. ISBN 978-80-8122-280-1
RÓKA, J., HOCHEL, S. 2009. Interkulturális és nemzetközi kommunikáció a globalizálódó világban. Budapest : Budapesti Kommunikációs és Üzleti Főiskola. ISBN 978-963-7340-74-1

Language, knowledge of which is necessary to complete a course:

hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 60

A	B	C	D	E	FX
18.33	26.67	28.33	21.67	1.67	3.33

Teacher: Dr. habil. PaedDr. Kinga Horváth, PhD., prof. Dr. András Németh, DSc., Dr. habil. PhDr. József Liszka, PhD., Dr. habil. PaedDr. Melinda Nagy, PhD., PaedDr. Patrik Baka, PhD., PaedDr. Beáta Kiss

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ RPK/22	**Name:** Gross motor development
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 5.	
Level of study: I.	
Prerequisites:	

Conditions for passing the subject:

The final assessment is a summary assessment of theoretical knowledge and practical skills. 80% active participation at the lectures.

The evaluation involves developing a seminar and presenting health practices for good physical well-being, as well as relaxation and relaxation practices to protect health.

The student will present at a seminar the learning of good terminology for physical exercise, basic rules for describing mobility.

Evidence of theoretical knowledge is given in writing during the examination period (open and closed questions). Credit terms and assessment criteria: Seminars in a range of 5 pages (A4, v.p.: 12, r.: 1,5), the preparatory part of educational activities and the presentation of health practices for good physical well-being, and relaxation and relaxation practices to protect health.

The student will present at a seminar the learning of good terminology for physical exercise, basic rules for describing mobility. Compliance with this requirement is a condition for participation in the final written knowledge check.

Assessment criteria (max. Score 15): The formal side of the seminar work, the feasibility of content and application options in terms of pedagogical practice, the appropriate selection of physical practices and kinesthetic games, the use of good terminology and a description of practices, the incorporation of sentences in content, the indication of educational activity in practical implementation.

A practical introduction to the extended preparation section, a variety of warm-up options (n=3), which are adapted in content and format to the selected age groups (younger school age, adults). Compliance with this requirement is a condition for participation in the final written knowledge check.

Assessment criteria: In order to meet this requirement, practical demonstration of the warm-up models produced is desirable depending on the age of the pedagogical performance, organization of practices and terminology.

Completed/not completed

Knowledge validation (open and closed questions) is the basic terminology of physical exercise, principles of graphical representation and drawing practices, laws on the mold development of human engine skills, including the development of basic movement patterns and mobility skills, growth attributes and human development at individual mold genetic stages, theory of theoretical

and didactic movement, health education, relaxation and relaxation practices, specificity of the development of the mobility of children of kindergarten age.
Participation in the written knowledge check is conditional on the fulfillment of the on-going conditions for the taking of credits (participation, preparation of medical practice aids, practical demonstration of sample satisfaction, seminar work).
Assessment criteria (maximum score 30): The minimum requirement for written completion of the subject is 16 points (minimum 50 %). Final assessment: V: 100-91% B: 90-81% C: 80-71% D: 70-61% E: 60-50% FX: 49% or less.
Total student workload : 2 credits = 60 hours, 13 hour participation at the lectures; 47 hours of self-study.

Results of education:
Knowledge:
• It is familiar with current public education programs, it will be able to implement and evaluate education and training.
• The trainee has basic knowledge of the area.
• It can work effectively as a team Member and individually control, using sports games.
• The student will be able to organize leisure activities.
• The student can acquire expertise in leisure activities and individual sports games.
• The student will be able to learn and use the basics of movement and pre-training in the wild.
Capabilities:
• The graduate knows and understands the concept of the institutional socialization process in a broader social science context It is ready to provide independent care, further education and professional development.
• The student will be able to properly create kinesthetic games that are appropriate for the age.
• The student will be able to apply his/her knowledge correctly in developing kinesthetic gaming projects.
Competences:
• The student will be able to apply his knowledge to his/her work, which may influence his/her professional choice.
• It is able to create a problem channel and to navigate the situation of individuals at the target groups.
• The student will be able to develop a targeted self-knowledge related to vocational guidance.
• The student will be able to design his/her activities independently.
• He knows the legislation and institutional context in which to exercise his profession. It has developed socially accepted civic attitudes and a positive attitude toward its profession and target group.
• The student will be able to develop a reliable, helpful, encouraging, attentive and accepted attitude, an open atmosphere to learn about and manage the way others work.

Brief syllabus:
The importance of kinesthetic toys for the somatic, physiological and psychological antisocial development of students. Kinesthetic toys and basic knowledge of their distribution. Use of kinesthetic games in practice and in leisure time. Collective sporting activities, didactic games. All-in-one games and their use: Play games, play games with a ball (FIT-BALL), and play games for children in the open. Learn the basic rules for handling kinesthetic games. Motion-manipulation toys. Terminology for physical practices. Basic rules for the movement description. Preparatory part of the educational activities - exercises, warm-up methods. The regularity and mold development of the growth and development of human motorized skills. The development of motorized skills and opportunities to develop motor skills at different stages of learners' development. Kinesthetic

toys and physical practices for good body-keeping. Kinesthetic games and physical exercises to improve basic movements. Kinesthetic games and physical exercises to develop basic mobility skills. Kinesthetic toys are designed to develop motorized skills fitness. Kinesthetic games aim at improving the capacity for the coordination of motor skills. Preparation, conduct, methodological and educational procedures (evaluations) for kinesthetic games. Relaxation, health and relaxation practices.

Literature:

Dobay Beáta: Mozgásos játékgyűjtemény, 2016 ISBN 978-80-81-22-192-7
Pektor Gabriella: Mozgásfejlesztő játékok gyűjteménye, 2011 ISBN 978-963-697-652-1
Farmosi István: Mozgásfejlődés, Dialog Campus, Pécs, 2007 ISBN 963-9310-06-9
Laczo Eugen a kol.: Rozvoj a diagnostika pohybových schopností detí a mládeže, Bratislava 2014, ISBN 978-80-97-14-66-0-3, http://www.telesnavychova.sk/userfiles/downloads/Rozvoj_diagnostika_PS_Laczo_2014.pdf
Nádasi Lajos: Motoros cselekvéses játékok az iskolai testnevelésben, 2001 ISBN 963-19-2112-3
Židek, J. et al.: Turistika a ochrana života a zdravia, Univerzita Komenského, Bratislava, 2013,
Židek, J. et al.: Turistika história turistiky obsah, druhy a formy turistiky ochrana prírody, PEEM, Bratislava, 2004

Language, knowledge of which is necessary to complete a course:
hungarian ,slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Dr. habil. PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ SOV/22	**Name:** Sociology of education
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Prerequisites for passing the course are: active participation of the student in the exercises and submission of a written thesis during the semester. The evaluation of the course will be made on the basis of the points obtained in the following distribution: a maximum of 10 points for participation, a maximum of 30 points for solving the semester assignments during the class and a maximum of 60 points for the submitted work. A 100-90%, B 89-80%, C 79-70%, D 69-60%, E 59-50%. FX 50% or less. Total student load: 1 credit = 30 hours (13 hours active participation in exercises; 17 hours study and preparation of written work).	
Results of education: The goal of this course is to introduce the student to various sociological conceptions of education and social expectations. The goal is to provide a foundation of sociological knowledge about the work of educators and the empathy needed to understand people in different social situations. Knowledge: - Acquire the basic concepts of the sociology of education, - The student will become familiar with the details of family and school socialization, - the student will become familiar with current methods for conflict and problem solving, - the student will become familiar with current social problems - the student will become familiar with current difficulties of social inequalities Skills: - The student will be able to independently search, compare, and use relevant sources of scholarly literature, - the student is able to recognize the difficulties of education and upbringing of children coming from different social backgrounds, - The student is able to manage a small social group, - the student is able to independently analyze a variety of educational situations, - the student is able to appreciate different social values. Competencies: - The student forms his/her own opinion, thinks of himself/herself as a future teacher, - the student is able to create his/her own procedures to achieve his/her own goals,	

- the student is empathetic towards different social groups,
- the student identifies with the mission of his/her institution,
- the student feels responsibility for effective problem solving.

Brief syllabus:

Problems addressed by the sociology of education. Opinions on the sociology of education.
The development of topics in the sociology of education: socio-historical context.
Scenarios of education, forms of socialization: family, pre-school, school and out-of-school education.
Family research from a sociological perspective: family functions and socialization.
Sociology of the educational system: the continental system. The Atlantic system. Who owns the school?
Theories of capital in educational research: human capital theory.
Cultural capital and the theory of reproduction. Social capital as a compensating factor of disadvantage.
Multi-culturalism, intercultural education: society and historical background. The concept and meaning of multicultural and intercultural education.
Approach to multicultural and intercultural education. Using multicultural and intercultural education to develop skills. Analysis of school performance and student achievement.
Social mobility and school: social structure, inequalities in school. Social mobility and equal opportunities in school.
Equal opportunities and inclusion in school: strategies for social and school coexistence.
Linguistic socialisation and school: School as a test of language ability and higher level language contact. Bernstein's language codes.
Effectiveness, good outcomes and adequacy in public education. Circumstances affecting effectiveness.
Minority education. Demographic trends in the Carpathian Basin.

Literature:

Csepeli Gy. et al. 1987 Modern polgári társadalomelméletek. Budapest: Gondolat Kiadó
ĎURDÍK, Ladislav. Asszimilációs folyamatok a szlovákiai magyarság körében. 1. vyd. Pozsony: Kalligram, 2004. 152 s. ISBN 978-80-7149-668-5.
Gál Gyöngyi: Erdélyből áttelepedett pedagógusok otthon- és családképe. Katolikus Pedagógia,VII. ÉVFOLYAM, 2018/1–2. SZÁM. pp.5-16 (2018).
Kováts-Németh Mária: Kultúraközvetítés és pedagógiai értékrendszerek. Komárno: Selye János Egyetem Tanárképző Kara, 2013.
Kozma Tamás: Bevezetés a neveléssszociológiába. Nemzeti Tankönyvkiadó 1994
Lannert Judit (2004): Minőség, hatékonyság, eredményesség. Új Pedagógiai Szemle,http://epa.oszk.hu/00000/00035/00087/2004-12-ko-Lannert-Hatekonysag.html
Tóth Péter, Holik Ildikó (szerk.): Új kutatások a neveléstudományokban 2015: Pedagógusok, tanulók, iskolák – az értékformálás, az értékközvetítés és az értékteremtés világa. MTA Pedagógiai Tudományos Bizottság, Budapest, 2016 ISSN 2062-090X.
Varga Aranka (szerk.): A neveléssszociológia alapjai 2015. Pécs. ISBN (epub) 978-963-642-850-1 – DOI 10.15170/BTK.2015.00001.https://mek.oszk.hu/14500/14566/14566.pdf
Továbbá a: Képzés és Gyakorlat, a Köznevelés, az Iskolakultúra, a Neveléstudomány,a Neveléssszociológia, a Pedagógusképzés, a Magyar Pedagógia, a Fejlesztő Pedagógia és az Egészségnevelés című folyóiratok tantárgyhoz kapcsolódó további írásai (2015-2021.)

Language, knowledge of which is necessary to complete a course:

hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 2

A	B	C	D	E	FX
50.0	0.0	50.0	0.0	0.0	0.0

Teacher: Gyöngyi Gál, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ STŽ/22	**Name:** Professional training
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week: For the study period:** 20s **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The conditions of professional training are set and regulated by the current Directive of the Dean of the Faculty of Education of the University of J Selye: Principles of pedagogical practice at the Faculty of Education of the University of J Selye. The student is obliged to follow the relevant part of this document related to the professional training (STZ). The requirements for taking the course are as follows: - active participation of the student in the professional training in the scope of 20 hours in accordance with the directive, - submission of a completed and certified professional training Protocol (STZ), - submission of a portfolio from the professional training, consisting of completed observation sheets, analyses and evaluation of the student (max. 50 points). Total student workload: 1 credit = 30 hours - 20 hours participation in the professional training (contact hours); 10 hours analysis and preparation of the portfolio. Prerequisite for successful completion of the course: 1.) submission of a completed and certifiedprofessional training protocol, 2.) obtaining at least 50% of the maximum course grade (50 points). Overall course pass mark: - Pass = 50 - 100% (25 - 50 points) - Fail = 49 - 0% (0 - 24 points)	
Results of education: Professional training is a stay of students in a school and in a school educational institution such as a school children's club, leisure centre, school boarding school, in order to participate not only in the educational process, but also in the day-to-day work of teachers and educators. Knowledge: - The student possesses basic theoretical knowledge in the field of education and training in schools and school educational institutions, - the student is familiar with the educational activities of teachers in schools and educators in school educational establishments,	

- the student is familiar with other work activities of teachers in schools and educators in school educational establishments,
- the student knows the course and sequence of the work activities of school teachers and school educators which do not relate to direct educational activities,
- the student knows the duties of teachers and educators depending on the educational environment - trip, excursion, children's camp, staying outdoors, etc,
- the student knows the possibilities and strategies of cooperation with other educators, teachers, supervisors, non-teaching staff, parents and other institutions.
Skills:
- The student is able to implement educational activities related to the work of teachers in schools and educators in educational settings,
- the student is able to carry out other work activities of teachers and educators in school educational establishments which are not related to direct educational activities,
- the student is able to cooperate with other educators, teachers, supervisors, non-teaching staff, parents and other institutions,
- the student can plan, implement, analyse and evaluate the course of educational activities.
Competences:
- The student is able to imply his/her own knowledge and experience into the independent implementation of educational activities in schools and educational institutions,
- the student is able to independently carry out other work activities related to the work of a teacher and educator, which are not related to direct educational activities,
- the student is able to conceive his/her own working procedures for effective observation, recording, analysis and evaluation of the course of educational and interest activities and other activities.

Brief syllabus:

Within the professional training of 20 hours, in addition to the educational process, the student will also be involved in activities such as administrative tasks, working with parents, participating in meetings, planning and implementation of interest activities, extracurricular activities, interest groups, preparing students for competitions, organizing competitions, organizing exhibitions, preparing projects, preparing teaching materials for work with an interactive whiteboard or smartphone, working with children in nature, participating in excursions. During the professional training, the student has the opportunity to teach more consecutive lessons, or to carry out interest activities and other activities, which will improve the quality of practical preparation for the teaching profession.
Ethical principles of professional training.
Organisational requirements of the professional training.
Material, technical, hygiene and safety requirements of the professional training.
Planning and designing the work, preparation for the activity.
Pedagogical reflection. Evaluation. Self-evaluation.
Pedagogical documentation

Literature:

CINDLEROVÁ, I,- CSEHIOVÁ, A. et al. 2021. Mentor Training: Materials and Tasks. 1. vyd. Ostrava: Ostravská univerzita, 268 s. ISBN 978-80-7599-294-9.
FRÝDKOVÁ, Eva. Metódy a formy spolupráce rodiny a školy. In Manažment školy v praxi: odborný mesačník pre manažment škôl, školských a predškolských zariadení. Bratislava: IURA EDITION, 2010, (12), 21-27. ISSN 1336-9849. [online]. Dostupné na internete: https://sekarl.euba.sk/arl-eu/sk/detail-eu_un_cat-0124951-Metody-a-formy-spoluprace-rodiny-a-skoly/

FÜLE, S. 2004. Napközi otthoni neveléstan. Budapesť : OKKER Kft, 2004. 147 s. ISBN 963-9228-85-0.
ORSOVICS, Y. a kol. 2018. A személyiségfejlesztés új kihívásai a nemzetiségi óvodákban és iskolákban. Komárno : UJS, 2018. 161 s. ISBN 978-80-8122-282-5.
SIROTOVÁ, M. 2015. Pedagogická prax v pregraduálnej príprave učiteľov. Trnava : UCM, 2015. 127 s. ISBN 978-80-8105-648-2.
Vyhláška Ministerstva školstva, vedy, výskumu a športu Slovenskej republiky č. 22/2022 Z. z. o školských výchovno-vzdelávacích zariadeniach. [online]. Dostupné na internete: <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2022/22/>.
Vyhláška Ministerstva školstva, vedy, výskumu a športu Slovenskej republiky č. 21/2022 Z. z. o pedagogickej dokumentácia a ďalšej dokumentácii. [online]. Dostupné na internete: https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2022/21/
Zákon č. 245/2008 z 22. mája 2008 o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov.
Ostatné dokumenty:
Aktuálna Smernica Dekana PF UJS: Zásady realizácie pedagogickej praxe na Pedagogickej fakulte Univerzity J Selyeho.
Az iskola, intézmény pedagógiai és egyéb dokumentációja.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

a	n
0.0	0.0

Teacher: Dr. László Pribék, PhD., PaedDr. Alexandra Nagyová, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ TFV/22	**Name:** Educational theory and educational philosophy
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar **Recommended extent of course (in hours):** **Per week:** 1 / 1 **For the study period:** 13 / 13 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: General requirements: • active participation, • written exam (50 point), • seminar assignments, groupwork • written essay a written essay on one of the specified topics of the course (min requirements: essay based on min. 5 literature, 15.000 character) (50 points) Criteria for assessing the written essay: - Content 20 points, - Formal structure 10 points, - Literature used 20 points. Total workload of the student: 3 credits = 90 hours (26 hours lecture and seminar; 32 hours of independent study, preparation for the exam and 32 hours for the essay). To successfully complete the course, at least 50% of the maximum number of points (100 points) must be obtained. Total assesment of the course: • A = 90 – 100% (150 – 135 point) • B = 80 – 89% (134 – 120 point) • C = 70 – 79% (119 – 105 point) • D = 60 – 69% (104 – 90 point) • E = 50 – 59% (89 – 75 point) • FX = 0 – 49% (0 – 74 point)	
Results of education: Knowledge: - The student knows and can interpret the results of recent research. - The student is able to understand and apply the results of new research in the field of education and pedagogy. - The student knows and be able to interpret the different conceptions of the human person, the related educational approaches, be aware of the socio-cultural factors influencing these approaches and recognise their implications for personal development.	

- The student is familiar with and able to apply different theoretical approaches and interpretations of education and its role.
- The student is able to develop his/her understanding of the person, the child and education in dialogue with other theories in an open-minded way; he/she will seek to develop a coherent approach of his/her own.
- The student is familiar with pedagogical methods that promote community building and development.
Skills:
- The student is able to develop an awareness of his/her own conception of man and child, of education, to communicate with others and to understand others' ideas about man;
- The student is able to search, compare and use relevant literature independently,
- The student is able to identify strategies appropriate to educational and pedagogical objectives,
- The student is able to select forms of organisation and to organise an environment conducive to effective learning,
- The student is able to analyse different educational situations independently and professionally,
- The student is able to reflect, analyse and evaluate his/her pedagogical experiences and views.
Competences:
- The student is sufficiently prepared and committed to carry out professional and pedagogical work in a responsible manner,
- the student takes responsibility for the mission of his/her institution,
- the student has a sense of responsibility for the effective solution of specific problems,
- the student has a democratic commitment to values and a sense of responsibility, is ready to accept values different from his/her own, and is open to learning about and respecting the opinions of others.

Brief syllabus:

Anthropological foundations of education. Culture- education-learning: the social mimesis; the mimetic foundations of cultural learning, traditions, celebration, play, rites and informal education.
Basic concepts of education: upbringing, culture - enculturation, socialisation, individualisation, education, learning.
Discipline and education, the purpose of education, the role of ideals and norms in education; the main European value systems (conservative-Christian, liberal, socialist, alternative) and their educational implications, diversity in schools, value pluralism.
Institutional education; school as a social institution: functions of school, mobility, school selection and equal opportunities. The hidden curriculum and school rites.
The relationship between family and school.
The relationship between school, local society and the state. Legislation on the functioning of education. Slovak education laws and ISCED.
Vulnerability of modern mass democracies and the totalitarianism.
The postmodern. Main directions and dilemmas of contemporary philosophy.

Literature:

Bárány Tibor (szerk.): Kiskáté. Kortárs filozófiai kiskönyvtár. Műút Könyvek, Miskolc, 2017. ISBN 978-615-5355-22-6
http://www.muut.hu/wp-content/uploads/kiskate.pdf
Csejtei Dezső (2016): Filozófia a mindennapokban. Gondolatok emberről, világról, Istenről. Attraktor, Gödöllő-Máriabesnyő. ISBN:9786155601101
https://www.szaktars.hu/attraktor/view/csejtei-dezso-filozofia-a-mindennapokban-gondolatok-emberrol-vilagrol-istenrol-2016/?pg=224&layout=s

Dietrich, Jürgen – Tenorth, Heiz-Elmar: A modern iskola kialakulása és működése. Műszaki Könyvkiadó, Budapest, 2003. ISBN 963 16 2757 8
Donald, Merlin (2002): Az emberi gondolkodás eredete. Osiris, Budapest. ISBN 963 389 085 3
Németh András (2004): Ember és világainak változásai. Németh András – Pukánszky Béla: A pedagógia problématörténete. Gondolat Kiadó, Budapest, 2004. ISBN: 9789639567184
Németh András: Nevelés – gyermek – iskola. Eötvös Kiadó, Budapest, 1997. ISBN: 9639024198
Németh András: Emberi idővilágok – pedagógiai megközelítések. Gondolat Kiadó, Budapest, 2013. ISBN 9789636932688
Wulf, Christoph: Az antropológia rövid összefoglalása. Enciklopédia Kiadó, Budapest, 2007. ISBN 963 9655 09 0

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 15

A	B	C	D	E	FX
20.0	13.33	40.0	13.33	13.33	0.0

Teacher: Dr. habil. Erika Kopp, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. Dr. Attila Józsefné Katalin Ambrus, DSc., Gyöngyi Gál, PhD., Katalin Kanczné Nagy, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ TKZ/22	**Name:** Movement culture and healthy lifestyle education

Types, range and methods of educational activities:
Form of study: Lecture
Recommended extent of course (in hours):
Per week: 1 **For the study period:** 13
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Active participation in hours, seminars and oral exams.
The content of the seminar work will be to plan part of the curriculum under the subject-matter of the curriculum for a selected type of school facility.
The definition of the competences of the child/student of the selected school facility type (50 points), the definition of the educational thematic area of the selected school facility type (50 points).
Final assessment: A-100-91% B-90-81%, C-80-71%, D-70-61%, E-60-50%. Students who do not reach 49% will not receive credit.
Total student workload: 2 credits = 60 hours, participation in 13 hour lectures (contact); 47 hours self-studying and preparation - half-year work.

Results of education:
Knowledge:
• The student is able to work with theoretical knowledge.
• The student is able to develop preparedness for child and youth health practices.
• The student can develop various tools to improve the mobility of children, young people and the adult population.
• The student can set up specific warm-up exercises per age group.
Capabilities:
• The student will be able to navigate through the AOP Education area of health and physical activity.
• The student has the ability to expand his or her knowledge and self-training.
• The student is able to develop their own preparedness and health practices for different age groups.
• The student is able to apply sentence-related knowledge in practice.
Competences:
• The student will be able to apply his/her knowledge in the course of his/her future work.
• It can make contact not only with children, but also with parents and adults.
• The student has the ability to provide professional reasons for his activity.
• The student is able to implement a targeted self-training development.

• The student is able to independently design activities that enhance his or her knowledge and contribute to his or her choice of profession.
• The student is able to demonstrate a reliable, helpful, encouraging, attentive and accepted attitude, to create an atmosphere open to knowledge.

Brief syllabus:
The theory and basic knowledge of physical culture, physical education and sport education. (physical culture, kinesthetic games, conditional, coordination, compensatory practices). The physical development of pupils' school age. Healthy lifestyle - elements of a healthy lifestyle for students. The main principles of a healthy lifestyle. Physical activity for a healthy lifestyle. Theoretical and basic knowledge, practical and recreational use of kinesthetic toys. Various sports activities in school clubs. Knowledge of basic tourism skills and information in nature in summer and winter. Organization of various sporting events under the legislation in force at the Ministry of Education of the Slovak Republic. Knowledge of basic health standards for sports activities in schools.

Literature:
Dobay, Beáta. Mozgásos játékgyűjtemény: (óvó- és alsó tagozatos pedagógusok részére). 1. vyd. Komárno: Univerzita J. Selyeho, 2016. 135 s. ISBN 978-80-8122-192-7.
Dobay, Beáta a Elena Bendíková. Pohybová aktivita v životnom štýle dospelých z hľadiska zdravia. 1. vyd. Komárom: Kompress, 2016. 104 s. ISBN 978-963-12-7613-8
Domonkos Mihály: Testkultúra, Juhász Gyula Pedagógiai Kar – Szeged, ISBN 978-963-306-366-8, http://www.ofi.hu/tudastar/kultura-testkultura, http://www.jgypk.u-szeged.hu/dok/tamopsport/Nadori-Dancs-Retsagi-Ekler-Gaspar%20-%20Sportelmeleti%20ismeretek
Gaál Sándorné, Kunos Andrásné : Testnevelési játékok anyaga és tervezése az óvodában, Szolnok, 0. - 246 s. - ISBN 963 650 519 5.
Gaál Sándorné: Mozgásfejlődés és fejlesztés az óvodában : Kézikönyv óvodapedagógusok számára / - 1. vyd. - Szarvas : Szarvaspress, 2010. - 332s. - ISBN 978-963-08-0198-0.
Gaál Sándorné, Bencze Sándorné: A testnevelés mozgásanyagának feldolgozása a 3-10 éves korosztály számára, Szarvas, 2004. - 224 s. - ISBN 0010409.
Rétsági Erzsébet: A testnevelés tantárgypedagógiája, Dialóg Campus, 2004Farmosi István: Mozgásfejlődés, Dialóg Campus, 2005
Šelingerová - Šelinger: Športová antropológia, SVSpTVaŠ, 2017
ZANZA TV – Testkultúra, https://zanza.tv/fogalom/testkultura

Language, knowledge of which is necessary to complete a course:
hungarian ,slovak language

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Dr. habil. PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ TPR/22	**Name:** Theory and practice of the management of educational institutions
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 6.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: General conditions for taking the course: - Active participation of the student in lectures, - Successful completion of a continuous knowledge test, - successful completion of the final examination. The course ends with an examination. The intermediate written knowledge test has a maximum score of 60 points. The final written knowledge test has a maximum score of 40 points. The successful completion of the course is subject to obtaining at least 50 % of the maximum possible grade for the course (100 points). The grade is awarded on the following scale: A - 90-100%, B - 80-89%, C - 70-79%, D - 60-69%, E- 50-59%. Total student load: 1 credit = 30 hours - 26 hours lecture attendance (contact hours); 4 hours self-study.	
Results of education: Knowledge: - The student has knowledge of the specifics of school management in the areas of comprehensive management, quality management, management styles, school marketing, school climate and culture - the student is familiar with management styles and can characterise them, - the student knows the structure of the school system of the Slovak Republic, - the student is familiar with school legislative documents, - the student is able to characterise the competences of the head teacher, his/her rights and duties, as well as the rights and duties of the founder and control bodies, - the student knows the forms of cooperation with partners of educational institutions, - the student knows the meaning and methods of evaluation and self-evaluation, - the student is familiar with pedagogical documentation related to the management of educational institutions (school educational and educational programmes), - the student knows the target and structural difference between the school educational programme of kindergarten and the educational programme of school educational institutions, - the student knows the background to the development of each programme, - the student knows the procedures for the development of individual programmes. Skills:	

- The student can independently search, compare and work with relevant literary sources,
- the student is able to navigate school legislative documents and search for relevant information,
- the student is able to establish cooperation with school partners and educational institutions,
Competences:
- The student is able to imply theoretical knowledge into his/her own pedagogical practice in the field of management and cooperation,
- the student is able to conceive his/her own practices in achieving the set objectives in the field of management and cooperation,
- the student is able to apply knowledge about school management in the context of school management in the Slovak Republic in relation to legislation,
- the student will be able to critically evaluate existing legal documents especially in relation to national schools,
- the student will be able to evaluate the ongoing changes in the field of public administration, to express his/her own opinion on the justification of self-governing structures in the process of school management,
- the student will feel responsible for the quality of individual programs for the benefit of an effective educational process.

Brief syllabus:

Functions of the school. The nature of school governance in a democratic society. Adaptability of the school management system.

The position and roles of the state administration in school management. The responsibilities of local government, school authorities and other bodies in the management of schools and schools.

The nature and content of management. Concepts and theories of management. Functions of management - basic and general management functions.

School management. Models of school management, their peculiarities. Organisational structure of the school. Comprehensive school management in the implementation of the school educational programme. Educational programmes from the point of view of school management. Management of the development and implementation of the school educational programme. Internal standards of the school as regulators of optimal functioning.

Management styles. Personality and communication skills of the school manager. School marketing from the point of view of contemporary school needs.

School climate and culture in terms of the development and implementation of the school educational programme.

Kindergarten and school education partners and their cooperation.

Evaluation and self-evaluation methods in management.

Legislative basis for the development of the school educational programme of kindergarten and educational programme of school educational establishments.

Principles of development and structure of the school educational program of kindergarten and educational program of school educational facilities.

Analysis of local conditions and possibilities of kindergarten and school educational facilities prior to the development of the educational and school educational program - SWOT analysis.

Stages of creation of school educational and educational programs.

Literature:

HORVÁTHOVÁ, K. Oktatásmenedzsment. Komárno : UJS, 2015. 200 s. ISBN 978-80-8122-136-1.

HORVÁTHOVÁ, K., OBDRŽÁLEK, Z. Organizácia a manažment školstva: Terminologický a výkladový slovník. Bratislava : SPN, 2004. 419 s. ISBN 80-10-00022-1.

HORVÁTHOVÁ, K. a kol. Otázky koncepcie prípravy riadiacich zamestnancov škôl. Nitra : UKF, 2011. 344 s. ISBN 978-80-558-0001-1.
HORVÁTHOVÁ, K. Školský manažment v nových spoločenských podmienkach (pre riadiacich pedagogických zamestnancov). Bratislava : UK, 2008. 181 s. ISBN 978-80-969178-8-4.
HORVÁTHOVÁ, K, MANNIOVÁ, J. Úvod do školského manažmentu. Ivanka pri Dunaji : AXIMA, 2008. 179 s. ISBN 978-80-969178-6-0.
KETS DE VRIES, M. The leadership mystique: Leading behavior in human enterprises. Great Britain : Pearson Education, 2006. 279 s. ISBN 978-1-4058-4019-4.
PRŮCHA, J. Moderní pedagogika. Praha Portál, 2009. 481 s. ISBN 978-80-7367-503-5.
SIVÁK, J. Minőség az óvodában. Budapest : Okker, 2001, 272 o. ISBN 963-9228-50-8.
SLAVÍK, J. Hodnocení v současné škole: Východiská a nové metody pro praxi. Praha : Portál, 1999. 190 s. ISBN 80-7178-262-9.
ŠTÁTNY PEDAGOGICKÝ ÚSTAV, 2016. Štátny vzdelávací program pre predprimárne vzdelávanie v materských školách [online]. Bratislava : ŠPÚ, 2016. 112 s. Dostupné na internete <https://www.statpedu.sk/files/articles/nove_dokumenty/statny-vzdelavaci-program/svp_materske_skoly_2016-17780_27322_1-10a0_6jul2016.pdf>.
Zákon č. 245/2008 z 22. mája 2008 o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov.
Zákon č. 138/2019 o pedagogických zamestnancoch a odborných zamestnancoch a o zmene a doplnení niektorých zákonov.
Zásady tvorby školských vzdelávacích programov a výchovných programov – www.statpedu.sk, www.minedu.sk.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 11

A	B	C	D	E	FX
36.36	45.45	9.09	9.09	0.0	0.0

Teacher: Dr. habil. PaedDr. Kinga Horváth, PhD., Dr. habil. Erika Kopp, PhD., PaedDr. Alexandra Nagyová, PhD., PaedDr. Beáta Kiss

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ TVD/22	**Name:** Creative workshop
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: - active participation of the student in the exercises - participation of the student in the assignments and participation in the discussions during the exercises - submission of term papers in physical and digital form and its presentation - Evaluation of the success of the semester work - max. 50 points: - quality - 20 points, - originality - 10 points, - formal aspect - 10 points, - a short oral explanation of the concept and content of the works the contents and the content of the submitted works - 10 points. - The successful completion of the course includes the submission of term papers in digitised form as a pdf document, with the quality and content of this document being assessed separately according to the following criteria - max. 30 points: - formal aspect - 10 points - quality of reproductions of the theses - 10 points - skills in the use of digital media (working with hardware and software) -10 points Evaluation - max. 80 points: A : 72 - 80 points (90 - 100%) B: 64 - 71 points (80 - 89%) C: 56-63 points (70-79%) D: 48 - 55 points (60 - 69%) E: 40 - 47 points (50 - 59%) Fx: 0-39 points (0-49%) Total student load: 1 credit = 30 hours - 13 hours of participation in exercises (contact hours); 8 hours of self-study; 9 hours of term paper preparation.	
Results of education: Knowledge Student/Student:	

- Knows the tools of the visual arts and their proper use
- knows the art techniques and their areas of application
- knows the application of some graphic, plastic and digital technologies
- knows the forms of visual education activities
- recognises the specificities of the visual representation of children and young people
- knows the methods of education aimed at developing creativity
- plans and organises forms of visual education and craft activities

Skills

The student is able to:
- use the tools of visual arts correctly and to apply them appropriately
- select and apply appropriate art techniques on the surface and in space
- use the elements of visual language in different ways on the surface and in space
- express themselves using art techniques on a given subject
- carry out certain graphic, plastic and digital processes
- to reflect on current social and cultural issues and critical thinking

Competencies:

The student is able to:
- Apply practical knowledge of the curriculum as applied to creative production practices
- apply the theoretical knowledge of the curriculum that he/she uses in a creative way
- establish own procedures for achieving goals in planning and implementing art activities
- to work independently in creative making practices or in learning the curriculum
- identify with their own profession in which they are fluent in developing their own abilities and skills
- feel responsible for methodologically correct planning, organisation and implementation of art activities
- to support the thinking and creative processes of children and young people and their visual expression

Brief syllabus:

Visual expression - perception, qualities, experience.
Ecology and environmental awareness in art education - land art, environmental art, arte povera.
The development of pictorial representation of children and young people - schematism, symbols, colour and form, space.
Phenomena of visual art - creation, styles.
Characteristics of media - typical expressive means of media.
Bookmaking - Japanese binding, paperback, picture book.
Theory and practice of digital competence - digital image and text, basics of typography and graphic design - poster, advertising, visual identity.
Synesthesia, smells, sounds and touch on canvas, free association of images based on our senses through art therapy.
The possibilities of spatial representation on the canvas - historical overview, peculiarities of spatial representation of children's drawings, basics of perspective representation.
Possibilities of integrating visual education into other areas of education.
Visual education by project method.
Environment: technology and tradition - objects, spaces, function.
Environment: technology and tradition - tradition, design, fashion.

Literature:

ARHNEIM, R. A vizuális élmény: Az alkotó látás pszichológiája. Budapest: Gondolat, 1979, 560 s. ISBN 9632801415

BÁLVÁNYOS, H. Esztétikai - művészeti ismeretek nevelés: Vizuális kultúra II. : Képzőművészet, tárgy - és környezetkultúra. Budapest: Balassi Kiadó, 1998, 168 s. ISBN 963 506 240 0.
BÁLVÁNYOS, H. Látás és szemléltetés. Budapest: Balassi Kiadó, 2003, 155 s. ISBN 963 506 521 3.
BÁLVÁNYOS, H., SÁNTA, L. Vizuális megismerés, kommunikáció. Budapest: Balassi Kiadó, 2000, 125s. ISBN 963 506 354 7.
BAKOS, T., BÁLVÁNYOS, H., PREISINGER ZS. A vizuális nevelés pedagógiája: 6-12 éves korosztályban. Budapest: Balassi Kiadó, 2001, 263 s. ISBN 963 506 398 9.
BEKE, M. 77 magyar népi játékok. Budapest: Corvina, 2017, 304 s. ISBN 978 963 13 6431 6. 161 s. ISBN 978-80-8122-335-8.
DVORSZKY, H. Design: A forma művészete. Budapest: Képzőművészeti Alap Kiadóvállalata, 1979, 295 s. ISBN 963 336 119 2
FEUER M. A gyermekrajzok fejlődéslélektana. Budapest: Akadémiai Kiadó, 2000, 405 s. ISBN 9630577321.
FIEDLER, J., VANCSURÁNÉ, S. A., HAJDÚ, A. Kép-játék-hang: Foglalkozási tervek képzőművészeti alkotásokhoz. Budapest: Pedellus Tankönyvkiadó, 2015, 80 s. ISBN 978-615-5154-63-8.
GOMBRICH E. H.. A művészet története. Budapest: Gondolat Kiadó, 1983, 522 s. ISBN 9632812158.
HEGYI, L. Avantgarde és transzavantgarde. Budapest: Magvető Kiadó, 1986, 520 s. ISBN 963 14 0875 2.
KÁRPÁTI A. A gyermekrajztól a fiatalok vizuális nyelvéig. Budapest: Akadémiai Kiadó, 2019, 210 s. ISBN 978 963 454 361 9.
KÁRPÁTI A. Firkák, formák, figurák: A vizuális nyelv fejlődése a kisgyermekkortól a serdülőkorig. Budapest: Dialóg Campus Kiadó, 2001, 198 s. ISBN 963 9123 36 6.
VIRÁGVÖLGYI P. A tipográfia mestersége számítógéppel. Budapest: Osiris, 2002, 262 s. ISBN 963379529X.

Language, knowledge of which is necessary to complete a course:
hungarian , slovakian

Notes:

Evaluation of subjects
Total number of evaluated students: 31

A	B	C	D	E	FX
61.29	12.9	9.68	0.0	3.23	12.9

Teacher: Mgr. Tímea Mészáros, Csilla Nagyová, ArtD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ UDP/22	**Name:** Introduction to pedagogical studies
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Prerequisites for successful completion of the course: - active participation of students in lectures, - written exam (50 points), - Creation and presentation of a term paper on one of the topics or subtopics of the course using at least 3 primary sources and at least 5 literary sources, min. 20 000 characters. Assessment of the term paper (50 points): - content 20 points, - formal structure 10 points, - list of references 20 points. Total student workload: 3 credits = 90 hours (26 hours of participation in contact teaching, 32 hours of self-study, 32 hours of term paper preparation) Final evaluation: maximum 100 points. 100 points are required to pass the course, i.e. 50% of the total, with the condition that at least half of the points (50%) must be obtained in each assignment. To achieve a grade A, you must obtain 90-100% (90-100 points); for grade B, 80-89% (80-89 points); for grade C, 70-79% (70-79 points); for grade D, 60-69% (60-69 points); and for grade E, 50-59% (59-50 points) of the total number of points.	
Results of education: Knowledge: - The student knows and can interpret the most important scientific results about human beings, the different ideas about human beings, the educational perceptions associated with them, is aware of the sociocultural factors influencing attitudes, and is aware of the implications of all this for personal development. - The student is able to understand and interpret the results of recent theoretical, anthropological and historical research adequate to teacher education. - The student is familiar with various theoretical approaches and interpretations of education and their roles and is able to apply them in his/her work. Skills: - Using the results of the discipline, the student approaches contemporary phenomena of education and pedagogy on the basis of new aspects, with a historical context.	

- The student should develop his/her image of people and children, his/her perception of education and upbringing, be able to be aware of it and communicate it to others.
- With democratic commitment and a sense of responsibility, the student is prepared to accept values other than his/her own, to recognize and respect the views of others.
- The student is able to reflectively interpret, analyze and evaluate his/her teaching experiences and opinions.
Competences:
- The student is able to form an independent opinion, to reflect on himself/herself as a future teacher.
- The student is able to develop his/her own procedures to achieve set goals,
- The student behaves empathetic towards different social groups.
- The student takes responsibility for the mission of his/her institution.
- Student feels responsible for the effective solution of each problem.

Brief syllabus:

Historical and cultural anthropological approach to education, basic concepts of education - human body, ritual, holiday, space, time, narrative knowledge, informal education, generational relations, education as a social primary function, evolution of culture (mimetic, mythic, paradigmatic) ;
Basic models of ancient Greek education, educational ideas of Greek philosophers (Socrates, Plato, Aristotle).
Augustinian principle of education, transformation of medieval man and his worlds - origins of medieval approach to children, education and education, institutionalized education of women.
The world of the Renaissance man, his important pedagogical thinkers (Vittorino da Feltre, Guarino da Verona, Neri St. Philippines, Juan Vives).
The Reformation and the Catholic renewal. Man and worldview - changes in childhood, the family model and women's education.
Early modern and modern man and his education - institutional education, its main ideologies (Comenius, Locke, Rousseau); temporal and institutional discipline.
The formation and development of modern European school systems in the 19th and 20th centuries.
The main stages of the development of Hungarian education (Ratio Educationis, Law on Popular Education); the age of the development of Hungarian women's education.
Pedagogical scientific thought, Herbart and his pupils, positivism, pedagogy of spiritual science, experimental pedagogical aspirations, paediatric studies and modern child psychology.
The crisis of modern times. School criticism, life reform, women's emancipation movements. The development and main trends of reform pedagogy (Montessori, Waldorf, Freinet, Jenaplan, Dalton-plan), their methodological role in the innovation of school, kindergarten and teaching practice.
Competence profile of the future teacher, practical activities and experience.

Literature:

Kéri Katalin: Hölgyek napernyővel. Nők a dualizmus kori Magyarországon 1867-1914. Pro Pannonia Kiadó, Pécs, 2008. ISBN: 9789639893092
Kéri Katalin: Lánynevelés és női művelődés az újkori Magyarországon: nemzetközi kitekintéssel és nőtörténeti alapozással. Kronosz Kiadó, Pécs, 2018.
ISBN: 9789634670377
Mészáros István – Németh András – Pukánszky Béla: Neveléstörténet. Bevezetés a pedagógia és az iskoláztatás történetébe. Osiris, Budapest, 2003. ISBN: 9633793432
Németh András: A reformpedagógia múltja és jelene. Nemzeti Tankönyvkiadó, Budapest, 1996. 2. átdolgozott és bővített kiadás: 1998, 3. kiadás: 1998; 4. kiadás 2001. ISBN 9789631921908
Németh András – Skiera Ehrenhard: Reformpedagógia és az iskola reformja. Nemzeti Tankönyvkiadó, Budapest, 1999. 2. kiadás 2003. ISBN: 9631901688

Németh András – Pukánszky Béla: A pedagógia problématörténete. Gondolat Kiadó, Budapest, 2004. ISBN: 9789639567184
Németh András et al: Alternatíy- és reformpedagógia a gyakorlatban http://nti.btk.pte.hu/dogitamas/BHF_FILES/html/99Nemeth/topic.php-topic=14.htm (2022.02.07.)
Pukánszki Béla István: Pedagógiai eszmetörténet. Budapest: Gondolat, 2013. ISBN 978-963-693-228-2.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 90

A	B	C	D	E	FX
43.33	22.22	14.44	3.33	2.22	14.44

Teacher: prof. Dr. Béla István Pukánszky, DSc., prof. Dr. Attila Józsefné Katalin Ambrus, DSc., Dr. habil. PaedDr. Kinga Horváth, PhD., prof. Dr. András Németh, DSc., Katalin Kanczné Nagy, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ VVP/22	**Name:** General and developmental psychology
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 5.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Successful completion of the course requires active participation in lectures and successful completion of a written examination. The final grade consists of the points obtained for fulfilling the requirements in the form of: max. 30 points for participation and max. 70 points for the exam. A student may obtain a maximum of 100 points in total. The final grade for the course is: A 100-90%, B 89-80%, C 79-70%, D 69-60%, E 59-50%. A grade of FX is awarded if the student achieves less than 50% of the total points. Total student load: 2 credit = 60 hours (26 hours: attendance at lectures, 34 hours: self-study and exam preparation).	
Results of education: After completing the course the student Knowledge: - Knows the basic terminology of the subject, knows different theoretical directions. - Knows the basic concepts of general psychology, such as perception, sensation, learning, memory, attention and concentration, communication, thinking, intelligence, emotion, motivation - Knows the mechanisms of cognitive, emotional and motivational processes. - Knows and can characterize the biological, psychological and sociological aspects of ontogenetic development of all developmental. - Knows the professional knowledge, developmental criteria, and psychological guidelines for public education participants (preschool, junior and senior school age periods, high school age, and lifelong learning). - Can translate theory into practice, familiar with progressive trends in special and applied psychology. - Familiar with methodological approaches, structure and aspects of job descriptions . Skills: - Is able to independently construct psychological criteria according to physical and mental age. - Is able to orient himself in the methods of the given problem, to apply observation schemes, sceering. - He is able to differentiate children and pupils with SEN, to follow the individual educational plan.	

- Can carry out depistication and orientation in pedagogical-psychological diagnostics.
- Is able to investigate and formulate theoretical and practical bases necessary for solving problems encountered in pedagogical practice regarding psychological processes and developmental peculiarities.
- He/she is able to collaborate and consult with other professionals, working in a team.
- Can apply the acquired knowledge in solving practical problems in various areas of social life, especially in pedagogical practice.
Competences:
- Responds flexibly and knowledgeably to problems, speaks democratically, acts tolerantly,
- Applies the principles of inclusive thinking, optimal working climate, cooperative methodology.
- Applies the acquired knowledge of psychological phenomena and processes and age specificities from the perspective of developmental psychology to his/her own studies, to specific pedagogical, methodological and didactic disciplines and subjects of pedagogical practice.
- Carries out targeted development of self-knowledge, participates in further education
- The graduate is characterized by creative thinking, independence in planning his/her own education, autonomy and responsibility in decision-making in relation to the issues of the field of study of teaching.

Brief syllabus:

Introduction to psychology, general psychology as a scientific discipline.
Biological factors of psyche, psychophysiology, perception and sensation
Learning, memory, attention and concentration
Speech and communication, verbal, non-verbal communication and metacommunication.
Feelings and emotions, motivation, thinking and thought processes,
Intelligence and models of intelligence, emotional intelligence, creativity.
Developmental psychology as a special scientific discipline - definition.
Physical and mental age - observation schemes.
Developmental scales and developmental periods.
Theories of development of Piaget, Freud, Erikson.
Generational changes and characteristics of generational differences x, y, z and alpha generations - change in intelligence structure
Gardner's theory of ability and its relevance to education, Rogers' theory of person-centred approach.
Recent research in developmental psychology.

Literature:

GOLEMAN, Daniel, N. KISS Zsuzsanna. Érzelmi intelligencia - 4. kiad. - Budapest : Háttér, 2008. - 456 s. - ISBN 9638128666.
BUGÁN Antal, OLHÁH Attila. Fejezetek a pszichológia alapterületeiből - 1. vyd. - Budapest : ELTE EÖTVÖS Kiadó, 2006. - 592 s. - ISBN 963 463 478 8.
PLÉH Csaba, BOROSS Ottilia. Pszichológia A-Z : A pszichológia legfontosabb fogalmai magyar és angol nyelven - 1. vyd. - Budapest : Akadémiai Kiadó, 2010. - 403 s. - ISBN 978 963 8658 0.
PLÉH Csaba. Bevezetés a pszichológiába : Olvasmányok és feladatok a lélektan alapkérdéseinek tanulmányozásához - 1. vyd. - Budapest : Osiris Kiadó, 2004. - 920 s. - ISBN 963 389 478 6.
PLÉH Csaba. A lélektan története - 2. vyd. - Budapest : Osiris Kiadó, 2010. - 652 s. - ISBN 978 963 276 052 0.
ATKINSON, R. 2000. Pszichológia. (Psychológia). Budapest : Osiris Kiadó. 2000.
Bordás, S., FORRÓ, Zs., NÉMETH, M. STRÉDL, T. Pszichológiai jegyzetek. 1. vydanie 2005. Komárno: UJS. ISBN 8096925156

BAGDY, E. 2002. Személyiségfejlesztő módszerek az iskolában. Budapest : Nemzeti Tankönyvkiadó, 2002. 308 s. ISBN 9631922359.
N. KOLLÁR, K. 2004. Pszichológia pedagógusoknak. Budapest : Osiris Kiadó, 2004. 637 s. ISBN 963389672X.
STRÉDL, T. 2009. Fejlődéslélektan (Vývinová psychológia). In Bordás-Forró-Németh-Stredl, T. 2009. Pszichológiai jegyzetek (Základy psychológie). Komárno : UJS. 2009. s. 156 – 210. ISBN 80-969251-5-6
VAJDA, ZS. 1990. A gyermek pszichológiai fejlődése. (Psychický vývoj dieťaťa). Budapest : 2006 (3. prepracované vydanie)
VAJDA, ZS., KÓSA, É. 2005. Neveléslélektan. (Psychológia výchovy). Budapest : Osiris Kiadó . 2005.,

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 18

A	B	C	D	E	FX
27.78	11.11	33.33	22.22	5.56	0.0

Teacher: PaedDr. Terézia Strédl, PhD., Mgr. Anita Tóth-Bakos, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ ZAP/22	**Name:** Introduction to academic writing

Types, range and methods of educational activities:
Form of study: Seminar
Recommended extent of course (in hours):
Per week: 1 **For the study period:** 13
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 4.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Total student workload:
- Developing and updating a research plan of at least 2 pages (20 points)
- development and adaptation of a research method and tool (20 points)
- presentation of the research tool and method in a minimum of 2 pages (20 points)
- testing of the research method and tool, summary of the experience in a minimum of 3 pages (40 points)

Final course grade:
- A = 90 - 100% (100 - 90 points)
- B = 80 - 89 % (89 - 80 points)
- C = 70-79 % (79-70 points)
- D = 60 - 69 % (69 - 60 points)
- E = 50 - 59 % (59 - 50 points)
- FX = 0 - 49 % (49 - 0 points)

Total student workload: 2 credit = 60 hours (13 hours: seminar attendance, 47 hours: self-study and research plan preparation).

Results of education:
Knowledge:
Upon completion of the course, the student will know
* the main features of scientific knowledge
* quantitative and qualitative methods of scientific knowledge
* methods of data collection
* the basics of case studies and internet research
* basic principles of writing bachelor theses
* methods and main features of literary research
* methods of reference to literature
* the link between learning style, learning environment and learning motivation
* measurement tools used in data collection and their main features
* scientific criteria of validity and reliability
* the requirement to ensure argumentative interpretation

Skills:

The student is able to
- formulate a research aim
- construct a research plan on a selected topic, for example, exploring learning styles
- develop principles of literary research
- evaluate the appropriateness of the research tools and methods used
Competencies:
The student can
- draw up their own research plan
- formulate hypotheses and/or questions
- choose own methods and tools to implement the research plan
- analyse the literature and formulate references to their results
- formulate summary ideas on the basis of the developed literature.

Brief syllabus:
Main features of scientific knowledge
Quantitative and qualitative directions of pedagogical science
Formulation of research questions and hypotheses
Selection and processing of literature
Methods of data collection (questionnaires, interview, observation, tests)
Case studies, internet research
Bachelor's thesis as a publication genre
System of references to literature
Learning style and learning environment
Didactics of learning
The connection between learning style and teaching style

Literature:
Andragógiai interdiszciplináris kutatásmódszertan / Kálmán Anikó. - 2. vyd. - Budapest : OKKER Oktatási és Kiadói Rt., 2005. - 148 s. - ISBN 963 9228 97 4.
Kutatásmódszertan = Elmélet, gyakorlat, tanulmányok : Oktatási segédlet / Menyhárt József. - 1. vyd. - Nitra-Nyitra : Nyitrai Konstantin Filozófus Egyetem -Univerzita Konštantína Filozofa v Nitre, 2015. - 167 s. - ISBN 978-80-558-0962-5.
A társadalomtudományi kutatás gyakorlata / Earl Babbie ; Gábor Kende. - 6. vyd. - Budapest : Balassi Kiadó, 2008. - 600 s. - ISBN 978-963-506-764-0.
Doing a Successful Research Project : Using Qualitative or Quantitative Methods / Martin Davies, Nathan Hughes. - 2. vyd. - Hampshire : Palgrave Macmillan, 2014. - 278 s. - ISBN 978-1-137-30642-5.
Doing Your Research Project : A Guide for First-time Researchers / Judith Bell, Stephen Waters. - 7. vyd. - London : McGraw-Hill Education, 2018. - 344 s. - ISBN 978-0-335-24338-9.
Metody pedagogického výzkumu : Základy kvantitativního výzkumu / Miroslav Chráska. - 2., akt. vyd. - Praha : Grada, 2016. - 254 s. - ISBN 978-80-247-5326-3.
Egyéni különbségek szerepe a tanulásban : Tanulási stratégiák / Tóth Péter. - 1. vyd. - Budapest : DSGI, 2012. - 143 s. - ISBN 978-963-88946-7-0.
Egyéni különbségek szerepe a tanulásban : A tanulási stílus / Tóth Péter. - 1. vyd. - Budapest : DSGI, 2011. - 222 s. - ISBN 978-963-88946-5-6.-
A hatékony tanulás titka: A hatékony tanítás és tanulás dinamikája / Paul Roeders, Gefferth Éva. - 1. vyd. : Trefort Kiadó, 2007. - 215 s. - ISBN 978-963-446-453-2.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: prof. Dr. Péter Tóth, PhD., Dr. László Pribék, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ ZPP/22	**Name:** Basics of first aid and biology for teachers

Types, range and methods of educational activities:
Form of study: Seminar
Recommended extent of course (in hours):
Per week: 1 **For the study period:** 13
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 1.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The condition for passing the subject is active participation in the seminars, which consist of a theoretical and practical part. During the practical part, the student will try out, practice, and at the end, demonstrate basic practical skills in providing emergency first aid in various simulated situations and various types of injuries and accidents.
The partial evaluation of the subject is the evaluation of the seminar work (extent of at least five pages, TNR font, font size 12) on an arbitrarily selected topic from the list of topics covered according to the subject outline.
Evaluation criteria (30%):
- Summary of the issue according to the currently available professional literature, drawn from at least three professional sources
- Description of a specific case based on own experience, or design of a specific practical method for implementing the given topic in practice
- Requirements for content, form, and graphic, image documentation.
In the final part, the student proves his theoretical knowledge by completing the test (70%).
Final grade of the subject: A – 100-90%, B – 89-80%, C – 79-70%, D – 69-60%, E – 59-50%.
Achieving 50% of the total points is necessary to award credits.
Total student load: 2 credits = 60 hours (13 hours: participation in lectures, 47 hours: self-study and preparation for the exam, preparation of a seminar paper).

Results of education:
Knowledge:
- The student can name the causes, consequences, and solutions of the most frequent sudden actions of traumatic and non-traumatic origin threatening the life and health of newborns, children, and adults.
- The student can summarize theoretical knowledge about basic life-saving actions, disorders of consciousness, breathing disorders, seizures, bleeding from wounds, shock, fractures, joint injuries, and burns.
- The student can design adjustments to create a safe environment for children and organize various school activities.
- The student can characterize individual organ systems and combine them with knowledge of first aid in case of failure of these systems.

Abilities:
- The student can evaluate situations with a focus on minimizing the risk of further endangering himself and can call emergency medical services and other components of the integrated rescue system in the event of an accident.
- The student can practically perform essential emergency support of life functions - opening the airways, rescue breathing, chest compressions (heart massage), stopping bleeding, stabilizing position, cardiopulmonary resuscitation (revival), including the use of automatic external defibrillation,
- The student can provide psychological support to the disabled.
- The student can provide health care for various types of children's diseases, such as allergies, metabolic disorders, parasites, and respiratory and gastrointestinal tract diseases.
Competencies:
- The student acquires a positive attitude toward providing first aid and preventing sudden threats to the life and health of school-age children and adults.
- The student can justify the importance of providing first aid in the emergency health care system in sudden life and health-threatening events.
- The student can practically use knowledge and skills in dealing with sudden life and serious health-threatening events of traumatic and/or non-traumatic origin.

Brief syllabus:

The importance of first aid, the implementation of first aid in the educational process, and the procedure for reporting an accident to the emergency services.
Safety in the school environment (in the building, in the yard, during free time activities), building a first aid kit at school and school activities.
Essential characteristics of the respiratory system. Determining the affected person's condition, examination of the airways and essential vital functions, stabilization position, removal of a foreign body from the airways, and artificial respiration.
The structure and function of the heart, diseases of the circulatory system, and the heart providing first aid in case of cardiac arrest.
The function of blood and blood elements, stopping bleeding in different types of wounds, types of bandages and wound dressing techniques, and internal bleeding.
Essential characteristics of the musculoskeletal system, muscles, and bones. Injury of tendons, joints, treatment of fractures.
Types of shock states, anaphylactic shock, and essential characteristics of the immune system.
Essential characteristics of the nervous system. Damage to the nervous system, epileptic seizure, convulsions, and first aid.
Essential characteristics of the skin. Types of burns, first aid for burns, eye injuries.
Essential characteristics of the gastrointestinal system. First aid for poisoning.
Wounds caused by stings, bites, planning, organization, and implementation of walks, trips, camps, and safe transportation of children.
Allergies, frequent diseases of the respiratory tract and gastrointestinal tract, parasites in childhood, autoimmune diseases, and metabolic disorders in children.

Literature:

ANDICS, L.: Elsősegély: Közúton, otthon, munkahelyen, közterületen – 1. vyd. – Budapest: Sophia Kiadó, 2004 – 86 s. – ISBN 963216279X.
BASS, D., MAURICE, K.: Elsősegélynyújtás csecsemőknek és gyermekeknek. – 1, vyd. – Békéscsaba: Booklands, 2000. – 160 s. – ISBN 97863 9613 62 1.
BODZSÁR, E., ZSÁKAI, A.: Humánbiológia: Gyakorlati kézikönyv. - 1. vyd.- Budapest: Elte Eötvös Kiadó, 2004 – 300 s. – ISBN 963 463 653 5.

MADER, S. S.: Human biology. - 11. vyd. - Boston: Wm. C. Brown Publishers, USA, – 2008. - 600 s. - ISBN 0-978-0-07-016778-0.
McCracken, T. O.: Háromdimenziós anatómiai atlasz. Budapest : Scolar Kiadó, 2000. - 237 s. - ISBN 978-963-9193-99-4.
NAGY, M.: Humánbiológia. – 1. vyd. – Komárno – Dunajská Streda: Selye János Egyetem – Lilium Aurum, 2006. – 250 s. – ISBN 8080622833.
PORÁČOVÁ, J., NAGY, M., BERNÁTOVÁ, R., a kol. Fyziológia živočíchov a človeka - 1. vyd. - Prešov : Fakulta humanitných a prírodných vied PU v Prešove, 2014. - 591 s., [36,65 AH]. - ISBN 978-80-555-1150-4.
STOPPARDOVÁ, M.: Prvá pomoc malým deťom: Stručný sprievodca prvou pomocou. – 1. vyd. – Bratislava: Slovart s.r.o., 2005. – 63 s. – ISBN 80-8085-022-4.
SZENTÁGOTHAI, J.: Funkcionális anatómia I.-III. Budapest : Medicina Könyvkiadó, 2006. - 710, 600, 800. - ISBN 963 242 565 0.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD., Dr. habil. PaedDr. Melinda Nagy, PhD., RNDr. Eva Tóthová Tarová, PhD.

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/UZ/ŠSB/22	**Name:** State Examination
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study:	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Conditions for qualifying for the State examination: a) completion of all compulsory courses (16 credits), b) obtaining at least 11 credits from the compulsory elective courses of the program, c) obtaining 5 credits from elective courses, d) obtaining 32 credits in the prescribed composition (to complete the subject of the state examination, the student has get 2 credit). In the oral state examination, the student gives an account of his own pedagogical, psychological and biological knowledge as components of education and training. The state examination takes the form of a colloquium, in which the student's pedagogical knowledge is evaluated by the state final examination committee. The oral exam is evaluated on the basis of the following grading scale: A – 100–90%, B – 90–80%, C – 80–70%, D – 70–60%, E – 60–50%. A student who does not reach 50% does not receive credit.	
Results of education: Knowledge: - the student can explain the biological and social psychological aspects of the development of school-aged students, - based on the basic principles of pedagogical diagnostics, the student is able to distinguish the students' current level of personal development and developmental characteristics, - the student is able to reflect on the psychological laws of the student's learning process, - the student can identify the students' individual learning styles, - the student can assess the impact of socio-cultural determinants on the student's personal development, - the student can evaluate the compensation function of the school in relation to the effects of the socio-cultural environment on the development and improvement of the student's personality, - the student has interdisciplinary knowledge about the developmental differences of students, which result from health or social disadvantages, - the student will be able to assess the possibilities of developing his own career in the career development system, - the student will be able to justify the choice of self-education methods.	

Skills:
- the student has basic practical experience in assessing the students' current level of development,
- the student will be able to accept the developmental differences and psychological characteristics of individual students,
- the student will be able to recognize the specific educational needs of students,
- the student will be able to respect students' individual learning methods,
- the student has basic practical experience in identifying the multicultural environment of students,
- the student is able to take into account the students' different levels of development.
Competencies:
- the student is able to select and use appropriate pedagogical and diagnostic methods (e.g. observation, interview) to assess students' personality characteristics,
- the student is able to interpret the results of the diagnostics, draw conclusions for choosing the strategy of the educational activity,
- the student is able to cooperate with experts in the preparation of individual educational programs,
- the student is able to cooperate in the creation/innovation of the school education program,
- the student is able to cooperate with various experts for the sake of his own professional development,
- the student is able to set the goals of his own professional development,
- the student is able to identify with the need for lifelong learning,
- the student is empathetic and socially committed.

Brief syllabus:
- Not relevant

Literature:
Literature indicated in the information sheets of the study program.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher:

Date of last update: 18.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KTVŠ/ VSA1a/22	**Name:** Leisure sport activities 1a
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 1.	
Level of study: I., I.II.	
Prerequisites:	
Conditions for passing the subject: The following conditions shall apply to the subject: General conditions for the performance of the subject: • active participation in the course is at least 80%, • various forms of kinesthetic activities: play balls, sultanas, swimming, aerobic exercise, body construction, exercise (kinesthetic activity selected by the student). General conditions for the performance of the subject: • active participation in the course is at least 80%, • course evaluation criteria: active participation, completed — not completed. • Demonstration Of the sporting activity chosen By the student: In the case of game games - demonstration of the training of an attacker and defense; in the case Of swimming, - demonstration of the technical features of different swimming pools; fitness - demonstration of certain basic practices for different muscle groups and without devices; Assessment: Presentation of the elements of the selected sport activity - 20p. Total student workload (module 2): 1 credits = 30 hours participation in 13 hours of practical training (contact); 27 hours build up a set of individual exercises. Evaluation criteria: Presentation of selected sports activities (at the discretion of the student).	
Results of education: Knowledge: The student shall be able to apply the practical skills of the chosen sport. The student recognizes the relationship between the chosen sport and a healthy lifestyle. Capabilities: The student is familiar with the basic features and practices of the chosen sport. The student can expand his knowledge and self-training. Competences: The student can also apply the knowledge acquired to the active use of leisure time. The student is able to independently plan the activity and expand his knowledge.	
Brief syllabus: 1. Understand the importance of physical activity as an essential part of everyday life and its impact on mental and physical health.	

2. Acquisition of football and football core rules (according to selected sports activities).
3. Acquisition of basic rules and basic beats for table tennis (focused on palm beats).
4. Acquisition of basketball, volleyball, acquisition of the basic rules and techniques of the sport (according to selected sports activities).
5. Exercise - according to the selected sports activities.
6. Introduction to aerobics practices.
7. Introduction to the aerobic practices of step aerobics.
8. Development of basic mobility skills - appropriate to selected sporting activities.
9. Acquisition by basic elements in float – speed swimming, breaststroke.
10. Acquisition of control methods for sporting activities - human beings - according to the selected sporting activities.
11. Development of standing — in selected sporting activities.
12. Development of coordination capabilities - torture - according to the selected sporting activities.
13. Output sport activity in selected sports.

Literature:

1005 röplabda játék és gyakorlat / Edi Bachmann, Martin Bachmann. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2000. - 344 s. - ISBN 963 9123 84 6.
1006 kosárlabda játék és gyakorlat / Peter Vary. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2001. - 317 s. - ISBN 963 9123 85 4.
1008 torna játék és gyakorlat : Kézikönyv tanároknak, edzőnek, játékosoknak / Ursula Häberling-Spöhel. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2003. - 271 s. - ISBN 963 9310 93 x.
1014 asztalitenisz játék és gyakorlat : Kézikönyv tanároknak, edzőknek, játékosoknak / Harry Blum. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2004. - 323 s. - ISBN 963 9542 07 5.
Die fitnesspyramide / Bob Anderson, Ed Burke. - Ulm : Franz Spiegel Buch GmbH, 1997. - 117 s. - ISBN 3585335258.
Sport a családban / Takács László. - Budapest : Sport, 1973. - 380 s. - ISBN 963 253 512 x.
Pohybová aktivita v životnom štýle dospelých z hľadiska zdravia/ Beáta Dobay-Elena Bendíková, 2016. ISBN 978-963-12-7613-8

Language, knowledge of which is necessary to complete a course:
Hungarian language, Slovak language

Notes:

Evaluation of subjects
Total number of evaluated students: 29

a	n
100.0	0.0

Teacher: Dr. habil. PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek

Date of last update: 28.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KTVŠ/ VSA1b/22	**Name:** Leisure sport activities 1b

Types, range and methods of educational activities:
Form of study: Practical
Recommended extent of course (in hours):
Per week: 1 **For the study period:** 13
Methods of study: present

Number of credits: 1

Recommended semester/trimester of study: 2.

Level of study: I., I.II.

Prerequisites:

Conditions for passing the subject:
The following conditions shall apply to the subject:
General conditions for the performance of the subject:
• active participation in the course is at least 80%,
• various forms of kinesthetic activities: play balls, sultanas, swimming, aerobic exercise, body construction, exercise (kinesthetic activity selected by the student).
General conditions for the performance of the subject:
• active participation in the course is at least 80%,
• course evaluation criteria: active participation, completed — not completed.
• Demonstration Of the sporting activity chosen By the student: In the case of game games - demonstration of the training of an attacker and defense; in the case Of swimming, - demonstration of the technical features of different swimming pools; fitness - demonstration of certain basic practices for different muscle groups and without devices;
Assessment: Presentation of the elements of the selected sport activity - 20p.
Final assessment: A: 100-91% B: 90-81 % C: 80 % TO 71 % D: 70 TO 61 % E: 60-51% FX: 50 %
Total student workload (module 2): 1 credits = 30 hours participation in 13 hours of practical training (contact); 27 hours of self-training for the specific sport.

Results of education:
Knowledge:
The student shall be able to apply the practical skills of the chosen sport.
The student recognizes the relationship between the chosen sport and a healthy lifestyle.
Capabilities:
The student is familiar with the basic features and practices of the chosen sport.
The student can expand his knowledge and self-training.
Competences:
The student can also apply the knowledge acquired to the active use of leisure time.
The student is able to independently plan the activity and expand his knowledge.

Brief syllabus:

1. Understand the importance of physical activity as an essential part of everyday life and its impact on mental and physical health.
2. Master the rules of the game and be able to make the right decisions in accordance with the rules of football/football, table tennis, basketball, volleyball (according to selected sports activities).
3. Master the rules of the 'table tennis' - learn how to open the 'table tennis'.
4. Learn the rules of the basketball, balls — learn the techniques of the basketball baskets on the basketball, and the regular execution of the basketball touch and bargaining touch.
5. Make conscious use of its knowledge to develop conditioned skills at training courses in line with selected sporting activities.
6. Preparation of the set of practice required for aerobic stress in the vessel with manual weights.
7. Become familiar with step aerobics and the applicability of steppers.
8. Developing mobility, including developing fitness for work - by selected sporting activity.
9 acquiring the method of float and float and repairing faults — backstroke, breaststroke- swimming by the way, using various kinds of devices.
10. Human health-based activities — practice of protection techniques — according to the selected sporting activities.
11. Conscious development of virtue — in selected sporting activities.
12. Improving coordination capabilities — balance development.
13. Output sport activity in selected sports.

Literature:

1005 röplabda játék és gyakorlat / Edi Bachmann, Martin Bachmann. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2000. - 344 s. - ISBN 963 9123 84 6.
1006 kosárlabda játék és gyakorlat / Peter Vary. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2001. - 317 s. - ISBN 963 9123 85 4.
1008 torna játék és gyakorlat : Kézikönyv tanároknak, edzőnek, játékosoknak / Ursula Häberling-Spöhel. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2003. - 271 s. - ISBN 963 9310 93 x.
1014 asztalitenisz játék és gyakorlat : Kézikönyv tanároknak, edzőknek, játékosoknak / Harry Blum. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2004. - 323 s. - ISBN 963 9542 07 5.
Die fitnesspyramide / Bob Anderson, Ed Burke. - Ulm : Franz Spiegel Buch GmbH, 1997. - 117 s. - ISBN 3585335258.
Sport a családban / Takács László. - Budapest : Sport, 1973. - 380 s. - ISBN 963 253 512 x.
Pohybová aktivita v životnom štýle dospelých z hľadiska zdravia/ Beáta Dobay-Elena Bendíková, 2016. ISBN 978-963-12-7613-8

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects

Total number of evaluated students: 37

a	n
100.0	0.0

Teacher: Dr. habil. PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek

Date of last update: 28.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KTVŠ/ VSA2a/22	**Name:** Leisure sport activities 2a
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 3.	
Level of study: I., I.II.	
Prerequisites:	
Conditions for passing the subject: The training course shall: The course is conditional on active participation in at least 80% of the hours. Various forms of movement, including ball games, table tennis, swimming, aerobic practices, fitness and group and reinforcement training. Assessment criteria: ● completion of the practical part of the training by at least 80 %. Assessment criteria: Active participation and full content of educational activities. Completed/not completed ● describe the practices according to the selected sporting activities of the student: Learning the techniques of kinesthetic activities, creating offensive and defensive game combinations and basic game systems in games. Acquiring and demonstrating basic techniques in swimming. At Fitnesssi: Acquisition and demonstration of basic practices for different body parts and groups of muscles, correct use of fitness tools and devices. Assessment criteria: Presentation of selected sports activities (at the choice of the learner). Total student workload: 1 credits = 30 hours Active participation - 13 hour exercises (contact); preparation 27 hours - build up a set of individual exercises. Evaluation criteria: Presentation of selected sports activities (at the discretion of the student).	
Results of education: Knowledge: The student shall be able to apply the practical skills of the chosen sport. The student recognizes the relationship between the chosen sport and a healthy lifestyle. Capabilities: The student is familiar with the basic features and practices of the chosen sport. The student can expand his knowledge and self-training. Competences: The student can also apply the knowledge acquired to the active use of leisure time. The student is able to independently plan the activity and expand his knowledge.	

Brief syllabus:

1. Understand the importance of physical activity as an essential part of everyday life and its impact on mental and physical health.
2. Acquisition Of football and football core rules (according to selected sports activities).
3. To learn basic rules for table tennis and beat technique.
4.basketball personal protection learning, panda-jumping acquisition of opening techniques, learning the basic rules and techniques of sport (according to selected sports activities).
5. Exercise - according to the selected sports activities.
6. Become familiar with the aerobik practices, using THE HOT-IRON utility.
7 introduction to step aerobik, aerobic practices — use of hand weights.
8. Developing basic mobility skills, including the development of speed, according to selected sporting activities.
9. Swimming learning - swathes, swimming techniques - use of aids and exercise of strolling.
10. Acquisition of control methods for sporting activities — semi-professional human beings — according to the selected sporting activities.
11. Developing speed capability through various means of support in selected sports activities.
12. Develop coordination capabilities — improve the sense of motion rhythm — in line with the selected sporting activities.
13. Output sport activity in selected sports

Literature:

1005 röplabda játék és gyakorlat / Edi Bachmann, Martin Bachmann. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2000. - 344 s. - ISBN 963 9123 84 6.
1006 kosárlabda játék és gyakorlat / Peter Vary. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2001. - 317 s. - ISBN 963 9123 85 4.
1008 torna játék és gyakorlat : Kézikönyv tanároknak, edzőnek, játékosoknak / Ursula Häberling-Spöhel. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2003. - 271 s. - ISBN 963 9310 93 x.
1014 asztalitenisz játék és gyakorlat : Kézikönyv tanároknak, edzőknek, játékosoknak / Harry Blum. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2004. - 323 s. - ISBN 963 9542 07 5.
Die fitnesspyramide / Bob Anderson, Ed Burke. - Ulm : Franz Spiegel Buch GmbH, 1997. - 117 s. - ISBN 3585335258.
Sport a családban / Takács László. - Budapest : Sport, 1973. - 380 s. - ISBN 963 253 512 x.
Pohybová aktivita v životnom štýle dospelých z hľadiska zdravia/ Beáta Dobay-Elena Bendíková, 2016. ISBN 978-963-12-7613-8

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects

Total number of evaluated students: 0

a	n
0.0	0.0

Teacher: Dr. habil. PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek

Date of last update: 28.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KTVŠ/ VSA2b/22	**Name:** Leisure sport activities 2b
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 4.	
Level of study: I., I.II.	
Prerequisites:	
Conditions for passing the subject: The training course shall: The course is conditional on active participation in at least 80% of the hours. Various forms of movement, including ball games, table tennis, swimming, aerobic practices, fitness and group and reinforcement training. Assessment criteria: ● completion of the practical part of the training by at least 80 %. Assessment criteria: Active participation and full content of educational activities. Completed/not completed ● describe the practices according to the selected sporting activities of the student: Learning the techniques of kinesthetic activities, creating offensive and defensive game combinations and basic game systems in games. Acquiring and demonstrating basic techniques in swimming. At Fitnesssi: Acquisition and demonstration of basic practices for different body parts and groups of muscles, correct use of fitness tools and devices. Assessment criteria: Presentation of selected sports activities (at the choice of the learner). Total student workload: 1 credits = 30 hours Active participation - 13 hour exercises (contact); preparation 27 hours - build up a set of individual exercises. Evaluation criteria: Presentation of selected sports activities (at the discretion of the student).	
Results of education: Knowledge: The student shall be able to apply the practical skills of the chosen sport. The student recognizes the relationship between the chosen sport and a healthy lifestyle. Capabilities: The student is familiar with the basic features and practices of the chosen sport. The student can expand his knowledge and self-training. Competences: The student can also apply the knowledge acquired to the active use of leisure time. The student is able to independently plan the activity and expand his knowledge.	

Brief syllabus:

1. Understand the importance of physical activity as an essential part of everyday life and its impact on mental and physical health.
2. The application of football and football rules, 3:3 game (according to selected sports activities).
3. Application of rules on table tennis and acquisition of various techniques of impact of table tennis.
4. Applying international rules, in basketball and volleyball, learning the various modes of basketball delivery, acquiring the technique of jumping from 3m to step (according to selected sports activities).
5. Develop a functional capability, with complex coordination capabilities, in line with the selected sporting activities.
6. Learning on the aerobics practices, using the weighting plates.
7. Acquiring the aerobic practices of step aerobics.
8. Development of the standing capacity by various means of support, according to the selected sporting activities.
9. Learning to use the skills - improving fast-float, float, back-float technology by using aids and techniques of drawing up the skills.
10. Use of a mixed-defense method throughout the course, according to the selected sports activities.
11. Development of standing capacity by various means of support - selected sporting activities.
12. Develop coordination capacity - develop responsiveness to selected sports activities.
13. Output sport activity in selected sports.

Literature:

1005 röplabda játék és gyakorlat / Edi Bachmann, Martin Bachmann. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2000. - 344 s. - ISBN 963 9123 84 6.
1006 kosárlabda játék és gyakorlat / Peter Vary. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2001. - 317 s. - ISBN 963 9123 85 4.
1008 torna játék és gyakorlat : Kézikönyv tanároknak, edzőnek, játékosoknak / Ursula Häberling-Spöhel. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2003. - 271 s. - ISBN 963 9310 93 x.
1014 asztalitenisz játék és gyakorlat : Kézikönyv tanároknak, edzőknek, játékosoknak / Harry Blum. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2004. - 323 s. - ISBN 963 9542 07 5.
Die fitnesspyramide / Bob Anderson, Ed Burke. - Ulm : Franz Spiegel Buch GmbH, 1997. - 117 s. - ISBN 3585335258.
Sport a családban / Takács László. - Budapest : Sport, 1973. - 380 s. - ISBN 963 253 512 x.
Pohybová aktivita v životnom štýle dospelých z hľadiska zdravia/ Beáta Dobay-Elena Bendíková, 2016. ISBN 978-963-12-7613-8

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects

Total number of evaluated students: 0

a	n
0.0	0.0

Teacher: Dr. habil. PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek

Date of last update: 28.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KTVŠ/ VSA3a/22	**Name:** Leisure sport activities 3a
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 5.	
Level of study: I., I.II.	
Prerequisites:	
Conditions for passing the subject: The training course shall: The course is conditional on active participation in at least 80% of the hours. Various forms of movement, including ball games, table tennis, swimming, aerobic practices, fitness and group and reinforcement training. Assessment criteria: ● Completion of the practical part of the training by at least 80 %. Assessment criteria: Active participation and full content of educational activities. Completed/not completed ● Describe the practices according to the selected sporting activities of the student: Learning the techniques of kinesthetic activities, creating offensive and defensive game combinations and basic game systems in games. Acquiring and demonstrating basic techniques in swimming. At Finesse: Acquisition and demonstration of basic practices for different body parts and groups of muscles, correct use of fitness tools and devices. Assessment criteria: Presentation of selected sports activities (at the choice of the learner). Total student workload: 1 credits = 30 hours Active participation - 13 hour exercises (contact); preparation 27 hours - build up a set of individual exercises. Evaluation criteria: Presentation of selected sports activities (at the discretion of the student).	
Results of education: Knowledge: The student shall be able to apply the practical skills of the chosen sport. The student recognizes the relationship between the chosen sport and a healthy lifestyle. Capabilities: The student is familiar with the basic features and practices of the chosen sport. The student can expand his knowledge and self-training. Competences: The student can also apply the knowledge acquired to the active use of leisure time. The student is able to independently plan the activity and expand his knowledge.	

Brief syllabus:

1. Understand the importance of physical activity as an essential part of everyday life and its impact on mental and physical health.
2. Games in football or football in accordance with international rules, games against 4:4 (according to selected sports activities).
3. The practice Of various drop-down techniques In table-tennis and table-tennis at a toy according to international rules.
4. Apply international sports rules during the game, learn to attack basketball, learn the techniques of jumping the net from one hop to the other volleyball (according to selected sports activities).
5. Exercise training with strength conditioning capabilities according to the sport activities selected.
6. Carrying out the exercises of the aerobics with its own weight.
7. Acquiring the aerobic practices Of step aerobics.
8. Developing basic mobility skills - speed - according to selected sports activities.
9. Developing floating techniques - crawl, breaststroke, backstroke - learn turning techniques in swimming.
10. Sediment according to selected sporting activities (2:1:2; 1:3:1; 2:2; 1:2).
11. Improving speed by various means of support for selected sports activities.
12. Develop coordination capabilities - exploratory skills - in line with selected sporting activities.
13. Output sport activity in selected sports.

Literature:

1005 röplabda játék és gyakorlat / Edi Bachmann, Martin Bachmann. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2000. - 344 s. - ISBN 963 9123 84 6.
1006 kosárlabda játék és gyakorlat / Peter Vary. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2001. - 317 s. - ISBN 963 9123 85 4.
1008 torna játék és gyakorlat : Kézikönyv tanároknak, edzőnek, játékosoknak / Ursula Häberling-Spöhel. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2003. - 271 s. - ISBN 963 9310 93 x.
1014 asztalitenisz játék és gyakorlat : Kézikönyv tanároknak, edzőknek, játékosoknak / Harry Blum. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2004. - 323 s. - ISBN 963 9542 07 5.
Die fitnesspyramide / Bob Anderson, Ed Burke. - Ulm : Franz Spiegel Buch GmbH, 1997. - 117 s. - ISBN 3585335258.
Sport a családban / Takács László. - Budapest : Sport, 1973. - 380 s. - ISBN 963 253 512 x.
Pohybová aktivita v životnom štýle dospelých z hľadiska zdravia/ Beáta Dobay-Elena Bendíková, 2016. ISBN 978-963-12-7613-8

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects

Total number of evaluated students: 0

a	n
0.0	0.0

Teacher: Dr. habil. PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek

Date of last update: 28.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KTVŠ/ VSA3b/22	**Name:** Leisure sport activities 3b

Types, range and methods of educational activities:
Form of study: Practical
Recommended extent of course (in hours):
Per week: 1 **For the study period:** 13
Methods of study: present

Number of credits: 1

Recommended semester/trimester of study: 6.

Level of study: I., I.II.

Prerequisites:

Conditions for passing the subject:
The following conditions shall apply to the subject:
General conditions for the performance of the subject:
• active participation in the course is at least 80%,
• various forms of kinesthetic activities: play balls, sultanas, swimming, aerobic exercise, body construction, exercise (kinesthetic activity selected by the student).
General conditions for the performance of the subject:
• active participation in the course is at least 80%,
• course evaluation criteria: active participation, completed — not completed.
• Demonstration Of the sporting activity chosen By the student: In the case of game games - demonstration of the training of an attacker and defense; in the case Of swimming, - demonstration of the technical features of different swimming pools; fitness - demonstration of certain basic practices for different muscle groups and without devices;
Assessment: Presentation of the elements of the selected sport activity - 20p.
Final assessment: A: 100-91% B: 90-81 % C: 80 % TO 71 % D: 70 TO 61 % E: 60-51% FX: 50 %
Total student workload (module 2): 1 credits = 30 hours participation in 13 hours of practical training (contact); 27 hours of self-training for the specific sport.

Results of education:
Knowledge:
The student shall be able to apply the practical skills of the chosen sport.
The student recognizes the relationship between the chosen sport and a healthy lifestyle.
Capabilities:
The student is familiar with the basic features and practices of the chosen sport.
The student can expand his knowledge and self-training.
Competences:
The student can also apply the knowledge acquired to the active use of leisure time.
The student is able to independently plan the activity and expand his knowledge.

Brief syllabus:

1. Understand the importance of physical activity as an essential part of everyday life and its impact on mental and physical health.
2. Games in football or football in accordance with international rules, games against 5:5 (according to selected sports activities).
3. The practice of various road-making techniques In table-tennis, table-tennis, according to international rules - raction.
4. Organize games, championships, basketball training in accordance with international rules 1:2:2; 1:3:1; practice of a net jump-out technique in a volleyball (according to selected sports activities).
5. Developing a konditional capacity - strength: Still image power, maximum force, speed-of-speed force - according to the selected sports activities.
6. Carrying out the exercises of the aerobis with its own weight.
7. Acquiring aerobic practices of step aerobik with different combinations.
8. Developing basic mobility skills in line with selected sports activities.
9. Developing the skills of the sex - fast-float, float, float - learn the skills of turning and jumping in swimming.
10. Acquiring various kinds of physical activity - according to the selected sporting activity (2:1:2; 1:3:1; 2:2; 1:2).
11. Developing speed — speed, speed of movement, speed of speed, speed of speed of speed, with various aids — for selected sports activities.
12. Develop coordination capabilities — spatial awareness capabilities — in accordance with selected sporting activities.
13. Output sport activity in selected sports.
According to the selected ball roll. Kinesthetic activities in different load zones — according to the sport activities selected. Preparation of a weekly microcycle plan to improve aerobic capacity.

Literature:

1005 röplabda játék és gyakorlat / Edi Bachmann, Martin Bachmann. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2000. - 344 s. - ISBN 963 9123 84 6.
1006 kosárlabda játék és gyakorlat / Peter Vary. - 1. vyd. - Budapest-Pécs : Dialóg Campus Kiadó, 2001. - 317 s. - ISBN 963 9123 85 4.
1008 torna játék és gyakorlat : Kézikönyv tanároknak, edzőnek, játékosoknak / Ursula Häberling-Spöhel. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2003. - 271 s. - ISBN 963 9310 93 x.
1014 asztalitenisz játék és gyakorlat : Kézikönyv tanároknak, edzőknek, játékosoknak / Harry Blum. - 1. vyd. - Budapest - Pécs : Dialóg Campus Kiadó, 2004. - 323 s. - ISBN 963 9542 07 5.
Die fitnesspyramide / Bob Anderson, Ed Burke. - Ulm : Franz Spiegel Buch GmbH, 1997. - 117 s. - ISBN 3585335258.
Sport a családban / Takács László. - Budapest : Sport, 1973. - 380 s. - ISBN 963 253 512 x.
Pohybová aktivita v životnom štýle dospelých z hľadiska zdravia/ Beáta Dobay-Elena Bendíková, 2016. ISBN 978-963-12-7613-8

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects

Total number of evaluated students: 0

a	n
0.0	0.0

Teacher: Dr. habil. PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek

Date of last update: 28.02.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ ZLD/22	**Name:** Basics of air transport

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 2 / 0 **For the study period:** 0 / 26 / 0
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The evaluation of the subject consists of a theoretical and a practical part. At the end of the semester, there will be a written test with maximum score of 75 points. Within the practical part (flight on the simulator), it is possible to get a total of 25 points. To receive grade A in the course, student must obtain at least 90 points, for grade B at least 80 points, for grade C at least 70 points, for grade D at least 60 points and for grade E at least 50 points. Credits will not be given to a student who obtain less than 50 points.

Results of education:
Knowledge:
After completing the subject, the student:
• has theoretical knowledge about air transport and unmanned aircraft systems, the history of aviation, aerodynamics, aviation meteorology, communication and aviation law,
• has the knowledge necessary to pass the theoretical part of the remote pilot examination.
Skills:
After completing the subject, the student:
• is able to perform a flight on the DJI Phantom 3 Flight Simulator.
Competencies:
After completing the subject, the student:
• has an active and responsible approach to completing tasks within the subject.

Brief syllabus:
1. Introduction to the subject Basics of Aviation, history of aviation.
2. Aircraft general knowledge.
3. The basics of flight – aerodynamics.
4. Airplane performance and flight planning.
5. Aviation meteorology.
6. A METAR report and TAF forecast.
7. Communication.
8. Aerodromes, interesting facts about airports.
9. Airspace, the ICAO map.
10. Operational procedures.

11. Aviation law and air traffic control procedures.
12. Unmanned aircraft systems (UAS), applications of UAS.
13. Flight on the simulator DJI Phantom 3 Flight Simulator.

Literature:

1. KELLER, L et al.: Učebnice pilota 2016. Příbram : Svět křídel, 2016. 408 s. ISBN 978-80-87567-89-0.
2. Letecká mapa ICAO Slovenska 2016.
3. FÁBIÁN, A.: PPL kézikönyv : A repülőgép-vezetés elmélete. Budapest : Skylight Cerative Ec., 2010. 466 s. ISBN 978-963-06-9062-1.
4. ATKINSON, S.: The Aircraft Book : The definitive visual history. London : Dorling Kindersley, 2013. 320 s. ISBN 978-1-4093-6480-1.
5. BEARD, R. W. – McLAIN, T. W.: Small Unmanned Aircraft : Theory and Practice. New Jersey, NJ : Princeton University Press, 2012. 300 s. ISBN 978-0-691-14921-9.
6. FEDERAL AVIATION ADMINISTRATION: Pilot's Handbook of Aeronautical Knowledge, 2016. Dostupné na: https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
Distribution of the student's workload:
60% of the workload - direct teaching, preparation for the test and the practical part (flight on the simulator).
40% of the workload - studying the literature, practicing the acquired knowledge.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: RNDr. Štefan Gubo, PhD., Ing. Ondrej Takáč, PhD.

Date of last update: 02.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KINF/ŠS/22	**Name:** State exam

Types, range and methods of educational activities:
Form of study:
Recommended extent of course (in hours):
Per week: For the study period:
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 5., 6..

Level of study: I.

Prerequisites:

Conditions for passing the subject:
All students who have met the requirements of the programme of study in the final year of their studies may take the state examination at the normal time of the study timetable.
In the oral state examination, the student will give an account of the knowledge and skills acquired in his/her field of specialisation and the interdisciplinary links with the relevant fields of specialisation. Demonstrate the ability to communicate information, ideas, problems and solutions to professional and lay audiences.
The state examination takes the form of a colloquium in which the student's performance is assessed on a scale from A to FX. The grade counts towards the overall state examination grade. The oral examination is graded on the following scale: A - 100-91%, B - 90-81%, C - 80-71%, D - 70-61%, E - 60-50%. A student who fails to achieve 50% will receive no credit.
The results of the state examination and the examination will be announced by the chairman of the board in public.

Results of education:
Knowledge:
- the student has acquired knowledge in the compulsory and profile subjects of the study programme,
- the student is able to define and interpret in his/her own words basic concepts, explain and describe basic processes, characterise and apply scientific methods of research in the areas specified in the subject's thematic plan,
- the ability to analyse and evaluate the knowledge acquired in the subject.

Skills:
- the student is able to present his/her expertise,
- the student is able to transfer his/her knowledge,
- the ability to organise and apply the theoretical knowledge acquired,
- the student has the ability to organise and apply the knowledge and to apply it in a coherent way.

Competences:
- the student is able to express his/her linguistic and professional culture in the oral examination,
- the student can use the knowledge acquired in a wider context,
- the ability to put into practice and organise the knowledge acquired,

- the student is able to use his/her knowledge in a creative way when solving problems and to analyse the problem and organise new solutions,
the student is able to answer the questions of the committee to the required standard.

Brief syllabus:
I. Fundamentals of Informatics
II. Programming

Literature:
Literature listed in the information sheets of the study programme

Language, knowledge of which is necessary to complete a course:
Hungarian or Slovak

Notes:
The state examination takes place before an examination board whose members are appointed by the dean.

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher:

Date of last update: 04.03.2022

Approved by: Dr. habil. PaedDr. Melinda Nagy, PhD., prof. Dr. Béla István Pukánszky, DSc., prof. RNDr. Tibor Kmeť, CSc.