

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ ANT2/15	<b>Name:</b> Anthropology II
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week: 1 For the study period: 13</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Exam - 100%. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.	
<b>Results of education:</b> Students acquire basic knowledge of the main areas of anthropology - antroposociogenézy, molecular anthropology, ethnic anthropology and human ecology.	
<b>Brief syllabus:</b> Principles of palaeoanthropological methodology, basic characteristics, origin and evolution of primates, evidence of the human development from an animal ancestor, not ontological documents of antropogeneze. The basic characteristic of hominids, the hypothesis of hominids evolution, the oldest hominids - Australopithecus. Fossil representatives of the Homo genus (main characteristics and the incidence of H. habilis, H. ergaster, H. rudolfensis, H. erectus, H. heidelbergensis, H. antecessor, H. neanderthalensis, H. sapiens). Genetic variability in the human population and the origin of genetic polymorphisms. Utilization of human genetics in anthropology. Morphological variability of human - factors of classification, physical and ethnic characteristics of the population of each continent, racism. Basics of human ecology.	
<b>Literature:</b> BODZSÁR, É., ZSÁKAI, A.: Humánbiológia (Gyakorlati kézikönyv). Budapest, 2003. BODZSÁR, É.: Humánbiológia: Életkorok biológiája: A pubertáskor. - 1. vyd. - Budapest : ELTE Eötvös Kiadó, 2003. - 235s. - ISBN 963 463 616 0 GYENIS GY.: Humánbiológia: A hominidák evolúciója. - Budapest : Nemzeti Tankönyvkiadó, 2001. - 228. - ISBN 963 1921 11 5 Feneis, H.: Anatomický obrazový slovník. Stuttgart : Georg Thieme Verlag, 1993. - 455s. - ISBN 80 7169 197 6 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 MUEHLENBEIN, M.P: Human Evolutionary Biology, Cambridge Un. Press, 2011 Nagy, M.: Humánbiológia, Lilium Aurum, Dunaszerdahely, 2006, ISBN 80-8062-283-3.	

Netter, F. H.: Humán anatómiai atlasz. Budapest : Medicina Könyvkiadó, 2004. - 562 s. ISBN 963 242 848 X

POSPÍŠIL, M.: Biológia človeka. Přírodovědecká fakulta UK Praha, 2001. - 286 s. - ISBN 80-223-1579-6

Wulf, Ch.: Az antropológia rövid összefoglalása. - 1. vyd. - Budapest : Enciklopédia Kiadó, 2007. - 323s. - 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: 110

A	B	C	D	E	FX
39.09	20.91	13.64	10.91	10.91	4.55

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

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ CDB/15	<b>Name:</b> Methodology of Teaching Biology Practice
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Continuous assessment - 50%, evaluation of study - 50%. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.	
<b>Results of education:</b> The students extends their teaching skills with new teaching techniques, and with practicing of selected teaching methods.	
<b>Brief syllabus:</b> The current status of biology in the curriculum of elementary and secondary education. Causes of structural and conceptual changes. Didactic system of biology, compulsory and optional subjects. The objectives of biological education at primary and secondary schools. Planning of the educational work. Year-round program of teaching plans. Learning tasks, their types in terms of performance of the operational processes, their function and application in acquiring, consolidating and repetition of subject matter. Structural didactic analysis of the curriculum (content, teaching and methodology), and its implementation on the chosen theme. Preparing for the lessons - complete synopsis written preparation (general model), demonstration of interpretations of a lesson. Other educational resources of teachers - functional use of teaching aids for different types and stages of lessons. Summary in the form of didactic test.	
<b>Literature:</b> Bajtoš, J.: Didaktika laboratórných predmetov. - Bratislava : STU - Slovenská Technická Univerzita, 1998. - 44 s. - ISBN 8022710881 BODZSÁR, É.: Kézikönyv a biológiatanítás módszertanához, Trefort Kiadó, Budapest 2005 Falus, I.: Didaktika. - Budapest : Nemzeti Tankönyvkiadó, 2003. - 552 s. - ISBN 9631952967 MARENČÍK, A. a kol.: Vybrané kapitoly z didaktiky biológie, Nitra, 2002 Štátny pedagogický ústav (2009a): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 2. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej</a> Štátny pedagogický ústav (2009b): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 3. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava	

2009, Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej>

Štátny vzdelávací program (2011): Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej>

Rámcový učebný plán pre základné školy s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7881/18675:2-921, Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2.alej>

Rámcový učebný plán pre gymnáziá so štvorročným a osemročným štúdiom s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7915/18752:1-922. Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a.alej>

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

Hungarian or Slovak

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 87

A	B	C	D	E	FX
78.16	10.34	3.45	5.75	2.3	0.0

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

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University					
<b>Name of the faculty:</b> Faculty of Education					
<b>Code:</b> KBIO/Bdm/ DAC-B/15		<b>Name:</b> Diploma Thesis with Defense			
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> <b>Recommended extent of course ( in hours ):</b> <b>Per week: For the study period:</b> <b>Methods of study:</b> present					
<b>Number of credits:</b> 4					
<b>Recommended semester/trimester of study:</b>					
<b>Level of study:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for passing the subject:</b> Thesis defense, which is evaluated by the state exams. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.					
<b>Results of education:</b> Student presents basic knowledge, habits and theoretical and practical skills required for work associated with the planning, research implementation in biology and publishing.					
<b>Brief syllabus:</b> Work submitted includes parts in accordance with the current directive of the Rector about the final thesis.					
<b>Literature:</b> Study literature mentioned in the assigned topic.					
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian or Slovak					
<b>Notes:</b>					
<b>Evaluation of subjects</b> Total number of evaluated students: 25					
A	B	C	D	E	FX
56.0	28.0	12.0	4.0	0.0	0.0
<b>Teacher:</b>					
<b>Date of last update:</b> 30.04.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ DIB/15	<b>Name:</b> Methodology of Teaching Biology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture / Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 / 1 <b>For the study period:</b> 13 / 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Continuous assessment of studies - 50%, oral exam - 50%. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.	
<b>Results of education:</b> Students acquire knowledge of key issues of didactic with emphasis on the educational process, its management and the possibilities for increase of effectiveness. On seminars students develop teaching skills, competences and learn to create models of lessons.	
<b>Brief syllabus:</b> Introduction to didactics of biology. The educational process in teaching biology. Didactic principles in teaching biology. Concept-setting-process in biology. Teaching methods in biology. Dialogical method. Methods of screening, assessment and control of knowledge, skills and habits, their application in primary and secondary schools. Teaching and organizational forms in biology. The lessons. Practical (laboratory) exercises in biology. Classification in biology, basic characteristics, principles of use in teaching biology.	
<b>Literature:</b> Bajtoš, J.: Didaktika laboratórných predmetov. - Bratislava : STU - Slovenská Technická Univerzita, 1998. - 44 s. - ISBN 8022710881 BODZSÁR, É.: Kézikönyv a biológiatanítás módszertanához, Trefort Kiadó, Budapest 2005 Falus, I.: Didaktika. - Budapest : Nemzeti Tankönyvkiadó, 2003. - 552 s. - ISBN 9631952967 Kalhous, Z.: Školní didaktika. - 2. vyd. - Praha : Portál, 2009. - 448 s. - ISBN 978-80-7367-571-4 MARENČÍK, A. a kol.: Vybrané kapitoly z didaktiky biológie, Nitra, 2002 Štátny pedagogický ústav (2009a): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 2. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej</a> Štátny pedagogický ústav (2009b): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 3. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej</a>	

Štátny vzdelávací program (2011): Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej>

Rámcový učebný plán pre základné školy s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7881/18675:2-921, Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2.alej>

Rámcový učebný plán pre gymnáziá so štvorročným a osemročným štúdiom s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7915/18752:1-922. Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a.alej>

Zákon NR SR 245/2008 Z.z. o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov v znení neskorších predpisov. Dostupný na: <https://www.minedu.sk/zakon-c-2452008-z-z-o-vychove-a-vzdelavani-skolsky-zakon-a-o-zmene-a-doplneni-niektorych-zakonov-v-zneni-neskorsich-predpisov/>

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

Hungarian or Slovak

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 88

A	B	C	D	E	FX
57.95	18.18	18.18	5.68	0.0	0.0

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

**Date of last update:** 30.04.2019

**Approved by:** Guarantee Dr. habil. PaedDr. Melinda Nagy, PhD. Guarantee prof. Dr. Péter Tóth, PhD. Guarantee doc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ EKL/15	<b>Name:</b> Ecology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> 2 exams during the semester each 25 points. A minimum of 25 points must be acquired during the semester to get accepted to the final exam. Final exam 50 points. Evaluation: A – 100-90%, B – 89-80%, C – 79-70%, D – 69-60%, E – 59-50%.	
<b>Results of education:</b> After completing the course the student knows the basic concepts, content, and distribution of ecology, gained knowledge from aut-, dem- and synecology and environmental sciences.	
<b>Brief syllabus:</b> Concept, content and distribution of ecology. Environmental factors, abiotic and biotic factors and the adaptation of living organisms to them. The concept of population, its structure, dynamics and genetics. Biocenosis and habitats. Characteristics of biocenoses. Bioregion (ecoregions) and the ecosystem. Biogeochemical cycles. The country. Man and the environment. Basic concepts and context of the environmental sciences.	
<b>Literature:</b> Fekete G.,(red.) (1998): A közösségi ökológia frontvonalai. Scientia, Budapest ISBN 963 8326 16 6 Kerényi A.: Általános környezetvédelem. Mozaik Oktatási Stúdió, Szeged, 1995 Kerényi A.: Európa természet és környezetvédelme. Nemzeti Tankönyvkiadó, Budapest, 2003 Kerényi E., (1997): Környezetvédelem Környezetgazdálkodás Környezettudomány. Elpídia, Budapest, ISBN 9638533625. Moravec J. a kol. (1994): Fytocenologie. Academia Praha ISBN 80-200-0128-X Terek J., Vostál Z., (2009): Základy ekológie a environmentalistiky. PU v Prešove FHPV, Prešov, ISBN 978-80-555-0094-2 Vološčuk I., Míchal I., (1991): Rozhovory o ekológii a ochrane prírody. Vydavateľstvo SZOPK Enviro v Martine, ISBN 80-8558-01-2	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian or Slovak	
<b>Notes:</b>	
<b>Evaluation of subjects</b>	



Total number of evaluated students: 89					
A	B	C	D	E	FX
38.2	50.56	6.74	2.25	1.12	1.12
<b>Teacher:</b> RNDr. Eva Tóthová Tarová, PhD., Dr. habil. Sarolta Zsuzsanna Mészárosné Darvai, PhD.					
<b>Date of last update:</b> 30.04.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ ENV/15	<b>Name:</b> Environmental education
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Defense of the final project - 100%. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50% Credits are not awarded to student, who do not achieve 50%.	
<b>Results of education:</b> Students acquire basic information, objectives, aspects and problems of environmental education, become familiar with the routing possibilities and concepts. Learn to combine theoretical knowledge with practical training and development of teaching skills and abilities of future trainers and coordinators of environmental education.	
<b>Brief syllabus:</b> Introduction to environmental education. Terminology and aspects of environmental education. Objectives, content and philosophy of environmental education, its development and direction. The structure of environmental education. Philosophical, psychological and sociological aspects of environmental education. Didactic methods, means and organizational forms of environmental education. Personality of ecology teachers, trainers and coordinators of environmental education. Teaching practice.	
<b>Literature:</b> Haas, M., Ondrová, E., Švajda, J.: Environmentálna výchova/Environmental education. Vydavateľstvo: Ústav vysokohorskej biológie Žilinskej univerzity, 2008, 135 strán KERÉNYI, A.: Általános környezetvédelem, Mozaik Oktatási Stúdió, Szeged, 1995 KOVÁTS-NÉMETH, M.: Az erdőpedagógiától a környezetpedagógiáig. Comenius Kft, Pécs, 2010, ISBN 978-963-9687-18-9 KOVÁTS-NÉMETH, M.: Fenntarthatóság, pedagógia, kutatás. - 1. vyd. - Győr : Nyugat-Magyarországi Egyetem Apáczai Csere János Kar, 2007. - 227 s. - ISBN 978-963-9364-85-1 Kriska, Gy., Maklári Jenőné, Scheuer, Zs.: Gyertek velünk erdei iskolába! Farkaserdei erdei iskola projekt /. - 1. vyd. : Flaccus Kiadó, 2002. - 186 s. - ISBN 963 94 12 07 4. Lükő, I.: Környezetpedagógia. - Budapest : Nemzeti Tankönyvkiadó, 2003. - 252 s. - ISBN 9631933768. Palovičová, Z.: Príroda ako náš osud : Úvod do environmentálnej etiky. - 1. vyd. - Bratislava : Metodicko-pedagogické centrum, 2007. - 72 s. - ISBN 978-80-8052-295-	

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

Hungarian or Slovak

**Notes:****Evaluation of subjects**

Total number of evaluated students: 106

A	B	C	D	E	FX
63.21	29.25	5.66	1.89	0.0	0.0

**Teacher:** Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD.**Date of last update:** 30.04.2019**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ ETO/15	<b>Name:</b> Ethology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Continuous assessment of studies - 50%, oral exam - 50%. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.	
<b>Results of education:</b> Students acquire knowledge about patterns of animal behavior and communication of individuals within populations.	
<b>Brief syllabus:</b> Introduction to ethology. Ontogeny of behavior. The brain and the higher nervous activity. Optical communications. Means of non-verbal communication. Acoustic communication. Contact behavior. Olfactory communication. Mutilation behavior. Food behavior. Reproductive behavior.	
<b>Literature:</b> Breed, M.D., Moore, J.: Animal Behavior. Academic Press, Jan 4, 2011 - Science - 496 pages, ISBN 978-0-12-372581-3 Czakó J.: Etológia kislexikon. Natura, Budapest, 1985. 109 s., ISBN: 9632331133 Csányi, V.: Kis etológia II. - Budapest : Gondolat, 1985. - 124. - ISBN 963 281 607 2. Lewis, D., Rezek, J.: Tajná řeč těla. - 1. vyd. - Praha : Nakladatelství Bondy, 2010. - 256 s. - ISBN 978-80-904471-7-2 Lorenz, K.: Összehasonlító magatartás-kutatás (Az etológia alapjai). Gondolat Könyvkiadó, Budapest, 1985. 374 s. Majer, J.: Hogyan viselkednek az állatok : Betekintés az etológiába. - 1. vyd. - Budapest : Tankönyvkiadó, 1985. - 145s. - ISBN 963 17 8383 9. Slater, P. J. B.: Bevezetés az etológiába. - 1. vyd. - Budapest : Mezőgazdasági Kiadó, 1987. - 205s. - ISBN 963 232 441 2. Thompson, L.L.: The Social Psychology of Organizational Behavior. - New York and Hove : Psychology Press, 2003. - 444. - ISBN 1841690848	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian or Slovak	
<b>Notes:</b>	

**Evaluation of subjects**

Total number of evaluated students: 145

A	B	C	D	E	FX
35.86	27.59	13.1	13.79	9.66	0.0

**Teacher:****Date of last update:** 30.04.2019**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University					
<b>Name of the faculty:</b> Faculty of Education					
<b>Code:</b> KBIO/Bdm/ EVO/15		<b>Name:</b> Evolutionary Biology			
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of study:</b> 1.					
<b>Level of study:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for passing the subject:</b> Written final test. Evaluation: A – 100-90%, B – 89-80%, C – 79-70%, D – 69-60%, E – 59-50%. Under 50% no credit will be given.					
<b>Results of education:</b> Based on examples from current scientific findings the student will understand the natural evolution processes					
<b>Brief syllabus:</b> Basic terms – ontogenesis, evolution. The hierarchic model of the ontogenesis. The evolutionary theories and the creationism. Darwin's theory of evolution, the Neo-Darwinism. Alternative theories of evolution. Ontogenesis and epigenesis Evolution and epigenesis. Ontogenesis and heterochromia.					
<b>Literature:</b> FLEGR, J.: Evoluční biologie, Academia, Praha, 2009. FORRÓ, L.: A Kárpát-medence állatvilágának kialakulása. Magyar Természettudományi Múzeum, Budapest, 2007. HAL, B.K.: Evolutionary Developmental Biology. Kluwer Academic Publishers, Dordrecht, 1999, 491 s. KOVÁČ, V.: Ontogenéza a evolúcia (učebný materiál - textová forma, CD ROM). 2003. MUEHLENBEIN, M.P: Human Evolutionary Biology, Cambridge Un. Press, 2011.					
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian or Slovak					
<b>Notes:</b>					
<b>Evaluation of subjects</b> Total number of evaluated students: 124					
A	B	C	D	E	FX
45.16	25.81	16.13	11.29	1.61	0.0
<b>Teacher:</b> PaedDr. Bálint Darnai, Dr. habil. PaedDr. Melinda Nagy, PhD.					

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ GEN2/15	<b>Name:</b> Genetics II
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture / Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 / 2 <b>For the study period:</b> 13 / 26 <b>Methods of study:</b> present	
<b>Number of credits:</b> 5	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Exam - 100%. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.	
<b>Results of education:</b> Students acquire basic knowledge of general and clinical genetics, genetic terminology, symptomatology of selected mutations, types of inheritance, basics of cytogenetics, population genetics and genetic analysis methods.	
<b>Brief syllabus:</b> The object of genetic research, development of genetics - basic stages, basic genetic terminology, the role of cells in the transfer of genetic information, patterns of cell division. Genetic code. Controlling of genetic system. The chromosomal theory of inheritance. Genetic sex determination. Introduction to developmental genetics. Extra-nuclear inheritance. Cytogenetics - basic concepts, methods, international nomenclature of chromosomes. Heredity and environment, mutagenesis. Population genetics. Inheritance of qualitative and quantitative traits. Genetic risk for the population and for the individual, building of family trees, determining genetic prognosis. Enzymopathies. Modern trends in genetics, gene mapping, gene manipulation, analysis of DNA, cloning. Prenatal diagnosis of genetic pathological conditions, genetic counseling.	
<b>Literature:</b> Borissza, E.: Ötösöm lesz genetikából. - Budapest : Calibra, 0. - 144. - ISBN 963 686 2117 Ferák, V., Sršeň, Š.: Genetika človeka. SPN, Bratislava, 1990. 488 s., ISBN 80-08-00349-9 HARTL, D. L., JONES, E. W. 2000. Genetics. Analysis of genes and genomes. Fifth Edition, Jones and Bartlett Publishers, Sudbury, Massachusetts, USA, ISBN 0-7637-0913-1 Mohay, J.: Genetika (kislexikon). Natura, 1986. - 180 s. - ISBN 963 233 119 2 Poráčová, J., Nagy, M., Zahatňanská, M. et al.: Biometria živočíchov a človeka. Prešovská univerzita v Prešove, FHPV, Univerzita J. Selyeho v Komárne, PF, Centrum excelentnosti ekológie, živočíchov a človeka, PU v Prešove, Prešov, 2011, p. 357, ISBN 978-80-555-0475-9 Rédei, P. Gy.: Genetika. Mezőgazdasági Kiadó, 1987. 830 s - ISBN 963 232 287 8 Snustad, P.D., Simmons, M.J.: Genetics, 6th Edition International Student Version. 2012, 784 pages, ISBN : 978-1-118-09242-2 Sršeň, Š., Sršňová, K.: Základy klinickej genetiky. Martin : Vydavateľstvo Osveta, spol. s.r.o., 2005. - 450 s. ISBN 80 8063 185 9	



Vodrážka, Z.: Biochemie. - 1. vyd. - Praha : Academia, 2007. - 190 s. - ISBN 978-80-200-0600-4.  
Watson, J.D.: DNS az élet titka. - 1. vyd. - Budapest : HVG Könyvek, 2004. - 450s. - ISBN 963  
7525 564

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

Hungarian or Slovak

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 108

A	B	C	D	E	FX
29.63	19.44	24.07	6.48	16.67	3.7

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

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ GEO/15	<b>Name:</b> Geology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture / Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 / 1 <b>For the study period:</b> 13 / 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> 2 exams during the semester each 25 points. A minimum of 25 points must be acquired during the semester to get accepted to the final exam. Final exam 50 points. Evaluation: A – 100-90%, B – 89-80%, C – 79-70%, D – 69-60%, E – 59-50%.	
<b>Results of education:</b> By completing this course the student will know all the required information that is necessary to teach geology and mineralogy in primary and secondary school.	
<b>Brief syllabus:</b> Introduction to geology. (subject, tasks, history) Inner and outer spheres of the Earth. The lithosphere and the genetic groups of rocks. Rock formation – magmatic - , sedimentary- and metamorphic formation. Magmatic-, sedimentary-, and metamorphic rocks. Structure, texture and deformations. Global tectonics. Mineralogy – general properties. Crystals – shape, structure, lattice, systems. Shape of the crystals. Physical properties of minerals. Mineral systems. Petrography.	
<b>Literature:</b> Báldi T., (1976): Bevezetés a földtanba. Tankönyvkiadó, Budapest. Dyda M., (2009) :Horninitvorné minerály pod mikroskopom. Vydav. UK v Bratislave, ISBN: 978-80-223-2370-3 LOUB, J.(1987): Krystalová struktura, symetrie a rentgenová difrakce. SPN, Praha, 1987. LOUB, J.(1971): Základy symetrie. SPN, Praha, 1971. Prokešová R., Spišiak J., (2010) : Všeobecná geológia, mineralógia a petrológia. Vydavateľstvo Univerzity Mateja Bela, Banská Bystrica, ISBN : 9788055700786 Vadász E., (1960) : Magyarország földtana. Akadémiai kiadó, Budapest. 646 s.	

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

Hungarian or Slovak

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 65

A	B	C	D	E	FX
12.31	13.85	10.77	12.31	47.69	3.08

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

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ GEP/15	<b>Name:</b> Development of the Earth and of Life on Earth
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture / Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 / 1 <b>For the study period:</b> 13 / 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> 2 exams during the semester each 25 points. A minimum of 25 points must be acquired during the semester to get accepted to the final exam. Final exam 50 points. Evaluation: A – 100-90%, B – 89-80%, C – 79-70%, D – 69-60%, E – 59-50%.	
<b>Results of education:</b> After completing the course students know the origin and evolution of Earth and life on it in geochronological sequence.	
<b>Brief syllabus:</b> Origin and evolution of the Universe and the Earth. Origin and evolution of the atmosphere, hydrosphere, lithosphere and biosphere. Fossilization. Age defining techniques. Basics of stratigraphy. Geology and geochronology Evolution of the Earth and the life in the Archaicum, Paleozoichum, Mezoichum, and in the Kainozoicum. Evolution of humans and different taxonomic groups of plants and animals.	
<b>Literature:</b> Báldi T., (1976): Bevezetés a földtanba. Tankönyvkiadó, Budapest, 304 s. Géczy B., (1986): Őslénytan. Tankönyvkiadó, Budapest, ISBN 963 17 9501 2. GÉCZY, B., (1993): Ősállattan. Invertebrata Paleontologia, Nemzeti Tankönyvkiadó, Budapest. ISBN 963 18 46007 5 GÉCZY, B., (1994): Ősállattan. Vertebrata Paleontologia, Nemzeti Tankönyvkiadó, Budapest. ISBN 963 18 4325 4 Houša V., (1980): Základy taxonomie pro zoopaleontology. SPN, Praha 169 s. Špinar, Z. V., Burian Z., (1984): Paleontologie obratlovcu. Academia, Praha. 864 s.	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian or Slovak	
<b>Notes:</b>	

**Evaluation of subjects**

Total number of evaluated students: 96

A	B	C	D	E	FX
13.54	7.29	8.33	11.46	50.0	9.38

**Teacher:** doc. RNDr. Róbert Gyepes, PhD., Ing. Pavol Balázs, PhD.**Date of last update:** 30.04.2019**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ MBB/15	<b>Name:</b> Molecular and Cellular Biology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Final exam - 100%. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.	
<b>Results of education:</b> Students acquire additional knowledge in molecular and cell biology and about its importance in the study of subjects related to biology.	
<b>Brief syllabus:</b> The structure and function of proteins. The structure of DNA and RNA. The structure of prokaryotic and eukaryotic chromosome. Genetic information, genetic code and its transmission. The replication of chromosomal and plasmid DNA. Transcription of bacterial and eukaryotic genome. Post-transcriptional modification of eukaryotic RNA. Translation of bacterial mRNA and eukaryotic RNA. Regulation of gene expression. Recombination of genetic material and its transfer. Transposition of genetic material. Molecular basis of the mutagenesis. Genetic engineering - terms.	
<b>Literature:</b> BÁLINT, M.: Molekuláris biológia I-II. -Műszaki Könyvkiadó, 2006, 414 oldal, ISBN: 9631626547 Cavalli-Sforza, L.L.: Genetikai átjáró : Különbözőségünk története. - 1. vyd. - Budapest : HVG Kiadó Rt., 2002. - 221 s. - ISBN 9637525246. Darnell, J.: Molecular cell biology: Scientific American Book, 1986. - 1188. - ISBN 0716714485. Hídvégi, E.: A Genom. Széphalom, 2003. - 280. - ISBN 0014078. Nosek, J., Tomáška, L.: Extrachromozomálne genetické elementy. - 1. vyd. - Bratislava : UK, 2001. - 160 s. MUEHLENBEIN, M.P: Human Evolutionary Biology, Cambridge Un. Press, 2011 Poráčová, J., Nagy, M., Zahatňanská, M. et al.: Biometria živočíchov a človeka. Prešovská univerzita v Prešove, FHPV, Univerzita J. Selyeho v Komárne, PF, Centrum excelentnosti ekológie, živočíchov a človeka, PU v Prešove, Prešov, 2011, p. 357, ISBN 978-80-555-0475-9 Rédei, P. Gy.: Genetika. Mezőgazdasági Kiadó, 1987. 830 s - ISBN 963 232 287 8 Snustad, P.D., Simmons, M.J.: Genetics, 6th Edition International Student Version. 2012, 784 pages, ISBN : 978-1-118-09242-2 Sutka, J.: Növényi citogenetika. - 1. vyd. - Budapest : Mezőgazda Kiadó, 2004. - 232 s. - ISBN 963 286 170 1.	

SZEBERÉNYI, J.: Molekuláris sejtbiológia. Dialogus Campus Kiadó, 392 s., ISBN 978-963-9950-54-2

Venetianer, P.: A DNS szép világa. - Budapest : Kulturtrade Kft, 2001. - 190. - ISBN 9639069574.

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

Hungarian or Slovak

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 104

A	B	C	D	E	FX
18.27	20.19	27.88	17.31	16.35	0.0

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

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ MIK/15	<b>Name:</b> Microbiology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture / Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 / 1 <b>For the study period:</b> 13 / 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Final Exam: 100 points maximum. Grading: A – 100 - 90%, B – 89 - 80%, C – 79 - 70%, D – 69 - 60%, E – 59 - 50%. 0–49 Failed/Unsatisfactor.	
<b>Results of education:</b> Microbiologists study microorganisms such as bacteria, viruses, algae, fungi, and some types of parasites. They try to understand how these organisms live, grow, and interact with their environments.	
<b>Brief syllabus:</b> Introduction to Microbiology. Microorganisms and the natural environment. Role of Microbes in Ecosystems. The Microbe: The Basics of Structure, Morphology, and Physiology as They Relate to Microbial Characterization and Attribution. Growth, metabolic partitioning, and the size of microorganisms. Microbial ecology. Classification of bacteria. Virus vs Prion. Techniques of Virus Cultivation. Fungal infections. Economic Uses and Benefits of Microorganisms. Laboratory procedure. Disinfection and Sterilization. Microbiology Laboratory Equipment. Good microbiological laboratory practice. Preparation of media and cultures. Cultivation of microorganisms. Staining of microorganisms. Methods for the Detection of Microorganisms. Antibiotic Effectiveness. Looking at the Structure of Cells in the Microscope	
<b>Literature:</b> ALFÖLDY, Z.: Orvosi mikrobiológia és immunitástan. 1. vyd. Budapest : Medicina, 1967. - 490 s. 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. SCHNEIDER, L.: Életünk és a mikrobák. 1. vyd. - Budapest : Móra Ferenc Könyvkiadó, 1974, 142 s. ISBN 963 11 0135 5. SZABÓ, I.: A bioszféra mikrobiológiája I. 1. vyd. - Budapest : Akadémiai Kiadó, 1992, 695 s. ISBN 963 05 6388 6.	
<b>Language, knowledge of which is necessary to complete a course:</b> hungarian, slovak language	



**Notes:****Evaluation of subjects**

Total number of evaluated students: 110

A	B	C	D	E	FX
46.36	20.0	17.27	9.09	7.27	0.0

**Teacher:** doc. Ing. Jozef Huszár, DrSc., RNDr. Eva Tóthová Tarová, PhD.**Date of last update:** 30.04.2019**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University					
<b>Name of the faculty:</b> Faculty of Education					
<b>Code:</b> KBIO/Bdm/ OKB3/15		<b>Name:</b> Professional Conversation for Biologists III			
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present					
<b>Number of credits:</b> 1					
<b>Recommended semester/trimester of study:</b> 3.					
<b>Level of study:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for passing the subject:</b> Final Exam: 100 points maximum. Grading: A – 100 - 90%, B – 89 - 80%, C – 79 - 70%, D – 69 - 60%, E – 59 - 50%. 0–49 Failed/Unsatisfactor.					
<b>Results of education:</b> Converstations: Molecular and Cellular Biology. Environmental education. The development of life on Earth. Genetics II. Anthropology II. Agriculture.					
<b>Brief syllabus:</b> Professional converstations: Molecular and Cellular Biology. Environmental education. The development of life on Earth. Genetics II. Anthropology II. Agriculture.					
<b>Literature:</b> GÁLOVÁ, Z. – SALAJ, J. MATUŠÍKOVÁ, I.: Molekulárna biológia. 2. vyd. Nitra : SPU, 2007, 165 s. - ISBN 978-80-8069-951-2. HRUBÝ, K.: Genetika 1. vyd. - Praha : Československé Akadémie Vied, 1961, 647 s. KVASNIČKOVÁ, D.: Životné prostredie. 1. vyd. : Slovenské pedagogické nakladateľstvo, 2002.160 s. ISBN 80-08-03341-X. MAKOVICKÝ, P.: A mezőgazdaság alapjai: Állattenyésztés. 1. vyd. Komárno: Univerzita J. Selyeho, 2015. 94 s. ISBN 978-80-8122-139-2. NÉMETH, T.: A precíziós mezőgazdaság módszertana. 1. vyd. - Szeged : MTA TAKI, 2007, 239 s. ISBN 978-963-482-834-1. SZEBERÉNYI, J.: Értem-e a molekuláris genetikát ? NATURA, 1982. - 304. - ISBN 963 233 080 3.					
<b>Language, knowledge of which is necessary to complete a course:</b> hungarian, slovak					
<b>Notes:</b>					
<b>Evaluation of subjects</b> Total number of evaluated students: 56					
A	B	C	D	E	FX
46.43	16.07	12.5	14.29	10.71	0.0

**Teacher:**

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ PX2-B/15	<b>Name:</b> Teaching Practice II - Biology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week: 20 For the study period: 260</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Students submit documentation concerning their teaching practice: completed observation sheets, records of teaching practice, preparation for lessons and evaluation of their ascent teaching practice.	
<b>Results of education:</b> Within the teaching practice students observe and analyze the educational process, learn to apply theoretical knowledge acquired during of study general subjects, general and specialized didactics, and gradually acquire teaching skills to conduct teaching profession.	
<b>Brief syllabus:</b> - 5 hours to listen: passive participation on the lesson of the coaching teacher during which the students observe the course of the lesson respectively. aspects of the educational process and recorde their experiences to the observation sheets; - 5 hours of preparation: student prepares according to the instructions and guidance of coaching teacher for active teaching activity, respectively. to lead teaching processe. - 5 hours of active teaching activity: student teach in the class selected by coaching teacher as a teacher and leads the lesson; - 5 hours of analysis and evaluation: coaching teacher and student collectively analyze the work of student from methodic and didactic points of view.	
<b>Literature:</b> Štátny pedagogický ústav (2009a): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 2. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej</a> Štátny pedagogický ústav (2009b): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 3. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej</a> Štátny vzdelávací program (2011): Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej</a> Rámcový učebný plán pre základné školy s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7881/18675:2-921, Dostupný na:	

<http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2.alej>

Rámcový učebný plán pre gymnáziá so štvorročným a osemročným štúdiom s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7915/18752:1-922. Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a.alej>

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

Hungarian or Slovak

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 11

A	B	C	D	E	FX
72.73	27.27	0.0	0.0	0.0	0.0

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

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ PX3-B/15	<b>Name:</b> Teaching Practice III - Biology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 20 <b>For the study period:</b> 260 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Students submit documentation concerning their teaching practice: completed observation sheets, records of teaching practice, preparation for lessons and evaluation of their ascent teaching practice.	
<b>Results of education:</b> Within the teaching practice students observe and analyze the educational process, learn to apply theoretical knowledge acquired during of study general subjects, general and specialized didactics, and gradually acquire teaching skills to conduct teaching profession.	
<b>Brief syllabus:</b> - 5 hours to listen: passive participation on the lesson of the coaching teacher during which the students observe the course of the lesson respectively. aspects of the educational process and recorde their experiences to the observation sheets; - 5 hours of preparation: student prepares according to the instructions and guidance of coaching teacher for active teaching activity, respectively. to lead teaching processe. - 5 hours of active teaching activity: student teach in the class selected by coaching teacher as a teacher and leads the lesson; - 5 hours of analysis and evaluation: coaching teacher and student collectively analyze the work of student from methodic and didactic points of view.	
<b>Literature:</b> Štátny pedagogický ústav (2009a): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 2. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej</a> Štátny pedagogický ústav (2009b): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 3. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej</a> Štátny vzdelávací program (2011): Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej</a> Rámcový učebný plán pre základné školy s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7881/18675:2-921, Dostupný na:	

<http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2.alej>

Rámcový učebný plán pre gymnáziá so štvorročným a osemročným štúdiom s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7915/18752:1-922. Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a.alej>

**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
80.0	20.0	0.0	0.0	0.0	0.0

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

**Date of last update:** 30.04.2019

**Approved by:** Guarantee Dr. habil. PaedDr. Melinda Nagy, PhD. Guarantee prof. Dr. Péter Tóth, PhD. Guarantee doc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ PX4-B/15	<b>Name:</b> Teaching Practice IV - Biology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 40 <b>For the study period:</b> 520 <b>Methods of study:</b> present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of study:</b> 4.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Students submit documentation concerning their teaching practice: completed observation sheets, records of teaching practice, preparation for lessons and evaluation of their ascent teaching practice.	
<b>Results of education:</b> Within the teaching practice students observe and analyze the educational process, learn to apply theoretical knowledge acquired during of study general subjects, general and specialized didactics, and gradually acquire teaching skills to conduct teaching profession.	
<b>Brief syllabus:</b> - 5 hours to listen: passive participation on the lesson of the coaching teacher during which the students observe the course of the lesson respectively. aspects of the educational process and record their experiences to the observation sheets; - 5 hours of preparation: student prepares according to the instructions and guidance of coaching teacher for active teaching activity, respectively. to lead teaching process. - 5 hours of active teaching activity: student teach in the class selected by coaching teacher as a teacher and leads the lesson; - 5 hours of analysis and evaluation: coaching teacher and student collectively analyze the work of student from methodic and didactic points of view.	
<b>Literature:</b> Štátny pedagogický ústav (2009a): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 2. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej</a> Štátny pedagogický ústav (2009b): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 3. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej</a> Štátny vzdelávací program (2011): Dostupný na: <a href="http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej">http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej</a> Rámcový učebný plán pre základné školy s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7881/18675:2-921, Dostupný na:	



<http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2.alej>

Rámcový učebný plán pre gymnáziá so štvorročným a osemročným štúdiom s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7915/18752:1-922. Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a.alej>

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

Hungarian or Slovak

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 28

A	B	C	D	E	FX
96.43	3.57	0.0	0.0	0.0	0.0

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

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University					
<b>Name of the faculty:</b> Faculty of Education					
<b>Code:</b> KBIO/Bdm/SZS/15		<b>Name:</b> Biology and Methodology of Teaching Biology			
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> <b>Recommended extent of course ( in hours ):</b> <b>Per week: For the study period:</b> <b>Methods of study:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of study:</b> 3., 4..					
<b>Level of study:</b> II.					
<b>Prerequisites:</b> KBIO/Bdm/GEN2/15 and KBIO/Bdm/MIK/15 and KBIO/Bdm/ZPV/15 and KBIO/Bdm/ANT2/15 and KBIO/Bdm/GEO/15 and KBIO/Bdm/MBB/15 and KBIO/Bdm/TPP/15 and KBIO/Bdm/DIB/15 and KBIO/Bdm/EKL/15 and KBIO/Bdm/GEP/15 and KBIO/Bdm/PX4-B/15					
<b>Conditions for passing the subject:</b> Oral answer of student evaluated by the Commission for state exams. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.					
<b>Results of education:</b> Through the subjects of the specialization, the graduate of the study programme Teacher Training in Biology (combined) masters the basic content of the disciplines of the specialization, the principles of its structure, is familiar with the methodology of producing the content of the specialization and its wider natural science and cultural and social contexts. The graduate is able to deal with this content as the product of human (scientific) activity and is able to design didactic intents and purposes in this context. In addition to managing teaching competences the graduate is able to participate in the development of methodological materials for teaching biology.					
<b>Brief syllabus:</b>					
<b>Literature:</b> Study literature listed in information sheet of compulsory courses.					
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian or Slovak					
<b>Notes:</b>					
<b>Evaluation of subjects</b> Total number of evaluated students: 43					
A	B	C	D	E	FX
18.6	27.91	13.95	23.26	16.28	0.0
<b>Teacher:</b>					
<b>Date of last update:</b> 30.04.2019					

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ TPP/15	<b>Name:</b> Field Work in Agricultural Production
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Final Exam: 100 points maximum. Grading: A – 100 - 90%, B – 89 - 80%, C – 79 - 70%, D – 69 - 60%, E – 59 - 50%. 0–49 Failed/Unsatisfactor.	
<b>Results of education:</b> Study of various domestic animal production systems in relation to sustainable agriculture and integrated ranch and farm management strategies. Consideration of environmental factors and overall profitability.	
<b>Brief syllabus:</b> To enable students to obtain basic knowledge on ecological aspects of agricultural production and efficient use of agricultural land in Slovak Republic, tillage methods, principles of crop alternation and crop rotation, weed control, relations between crop and livestock production. To teach bases of agricultural production, to emphasize impacts on the soil and the environment.	
<b>Literature:</b> BRESTENSKÝ, V. a kol.: Sprievodca chovateľa hospodárskych zvierat. Publikácie VÚŽV Nitra 5, 2002. 231 s. IVÁN, Cs.: Welfare institutions and the transition: in the search off e. Budapest : Magyar Tudományos Akadémia, 1997, 48 s. ISBN 0663725. KUHN, V.: Špeciálne pestovanie rastlín. Vyd.: Slovenské vydavateľstvo pôdohospodárskej literatúry v Bratislave, 1962, 485 s. MAKOVICKÝ, P.: A mezőgazdaság alapjai: Állattenyésztés. 1. vyd. Komárno: Univerzita J. Selyeho, 2015. 94 s. ISBN 978-80-8122-139-2. SZÉLES, G.: Az agrárgazdaság aktuális kérdései. Budapest : Akadémiai, 2002, 184 s. ISBN 9630560976. TANČIN, V. a kol.: Fyziológia ziskavania mlieka a anatómia vemena. Vyd. VÚŽV Nitra, 2001, 122 s.	
<b>Language, knowledge of which is necessary to complete a course:</b> hungarian, slovak	
<b>Notes:</b>	
<b>Evaluation of subjects</b>	

Total number of evaluated students: 110

A	B	C	D	E	FX
81.82	11.82	3.64	1.82	0.0	0.91

**Teacher:** Ing. Pavol Balázs, PhD., Ing. Iveta Szencziová, PhD.

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/Bdm/ ZPV/15	<b>Name:</b> Basics of Agricultural Production
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Final Exam: 100 points maximum. Grading: A – 100 - 90%, B – 89 - 80%, C – 79 - 70%, D – 69 - 60%, E – 59 - 50%. 0–49 Failed/Unsatisfactor.	
<b>Results of education:</b> To enable students to obtain basic knowledge on ecological aspects of agricultural production and efficient use of agricultural land in CR, tillage methods, principles of crop alternation and crop rotation, weed control, relations between crop and livestock production. To teach bases of agricultural production, to emphasize impacts on the soil and the environment.	
<b>Brief syllabus:</b> The emergence and development of agriculture. The Origin and Domestication of Cultivated Plants. History of the domestication of animals. Land Use Modeling. Upgrading of components in the cultivation of crop plants and their effects on the environment. Crop Rotations and Conservation Tillage. Impact of pesticides use in agriculture: their benefits and hazards. Livestock production: recent trends, future prospects. Welfare. Farm and garden.	
<b>Literature:</b> BRESTENSKÝ, V. a kol.: Sprievodca chovateľa hospodárskych zvierat. VÚŽV Nitra 5, 2002. 231 s. BROOKE, P. Mi és a háztáji állatok. Fauna Egyesület, 1990, 40 s. ISBN 0011055. DEMO, M.: Udržateľný rozvoj. 1. vyd., Nitra : SPU, 2006., 440 s. ISBN 978-80-8069-826-3 IVÁN, Cs. Welfare institutions and the transition: in the search off e. Budapest : Magyar Tudományos Akadémia, 1997, 48 s. ISBN 0663725. JURIŠ, P.: Hygienické a ekologické požiadavky na recykláciu organických odpadov v poľnohospodárstve. 1. vyd., Košice, 2000, 160 s. ISBN 80-7165-257-1. KOROKNAY, I.: Az állatok nagy képeskönyve. Budapest : Móra Ferenc Könyvkiadó, 1975, 240. ISBN 9631102696. KUHN, V.: Špeciálne pestovanie rastlín. Vyd.: Slovenské vydavateľstvo pôdohospodárskej literatúry v Bratislave, 1962, 485 s. MAKOVICKÝ, P.: A mezőgazdaság alapjai: Állattenyésztés. 1. vyd. Komárno: Univerzita J. Selyeho, 2015. 94 s. ISBN 978-80-8122-139-2.	
<b>Language, knowledge of which is necessary to complete a course:</b>	

hungarian, slovak					
<b>Notes:</b>					
<b>Evaluation of subjects</b>					
Total number of evaluated students: 112					
A	B	C	D	E	FX
28.57	17.86	21.43	15.18	16.07	0.89
<b>Teacher:</b> Ing. Pavol Balázs, PhD.					
<b>Date of last update:</b> 30.04.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ CDS/15	<b>Name:</b> Chemical and Didactical Software
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students can gather 60% of the maximum points from the active participation of the course and homeworks, while the remainder 40% of the points can get from project realization and its presentation. For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course the students will acquire skill in selected software and aptitude to integrate them into the education process.	
<b>Brief syllabus:</b> 1. Basis of the cheminformatics. 2. Simulation of the physical properties of the molecule. Overview of the quantum-chemistry software. (Gaussian, Abinit, MOLCAS). 3. Vizualization the simulation and the results of the theoretical calculations. (ChemCraft, Molden). 4. Office suite programs to support the theacher professional work (MS-WORD, MS-PowerPoint) 5. Graphical editors in chemistry (ACD/ChemSketch, Avogadro) 6. Simulation and vizualization in virtual chemistry laboratory. (Virtual Lab, Yenka, virtuálny mikroskop NASA) 7. MindMapping software in chemistry conceptual learning (FreeMind, iMindMap) 8. Aplication eduROM – Chémia I.,II. 9. Learning by playing software in chemistry education. (PurposeGame, ThinkLink, prostriedky Discovery Education, interaktívne PT) 10. E-learning a on-line chemistry learning contents (Planéta vedomosti – RealikaEducatio, naučteviac.sk, sulinet.hu) 11. Interactive white board and its tools in chemistry education. 12. Website as a source of chemistry learning contents. Student project. 13. Presentation and defence of the students‘ project. The final evaluation of the course.	
<b>Literature:</b> 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. BRESTENSKÁ, Beáta et al. Premena školy s využitím IKT. Využitie IKT v danom predmete: spoločná časť.	



JAVOROVA, Katarína et al. Využitie informačných a komunikačných technológií v predmete chémia pre základné školy. Učebný materiál – modul3. Košice: pre UIPŠ vydal elfa, s.r.o., 2010. ISBN 978-80-8086-157-5.

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 19

A	B	C	D	E	FX
57.89	10.53	10.53	10.53	5.26	5.26

**Teacher:** Mgr. Katarína Szarka, PhD., Dr. habil. PaedDr. György Juhász, PhD.

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ DC1/15	<b>Name:</b> Didactics of Chemistry I.
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered two written tests each of maximum 30 points, while he/she can gather another 40 points with homeworks assigned during the semester. For the successful termination of the course, one has to gather at least 50 points (i.e. 50% of the maximum count of points). For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course, the students will acquire theoretical knowledge about general didactics point the chemistry education.	
<b>Brief syllabus:</b> 1. Introduction. Didactics as science. Object of Didactics. General and Subject-oriental Didactics. 2. Characterization the education system in Slovakia. 3. National and school education program – education field „Človek a príroda“. Curriculum framework. Chemistry in curriculum framework. Chemistry educational standards. Cross curricular themes in education field „Človek a príroda“. Requirement for chemistry leaving exam. 4. Teaching plan. Lesson plan. Curriculum and its structure. Textbooks, workbooks, learning and teaching equipments, didactical materials and tools – in generally. 5. Teaching process. Education goals. The conditions and phases of the education process. 6. The 1st writting test. 7. The teaching principles. 8. Classification of the teaching methods and their description. 9. The organization forms of the classroom lesson in chemistry education. 10. Teaching and learning equipments, didactical materials and tools in chemistry education. 11. Teacher’s lesson plan. How to prepare for the teaching process? 12. The 2nd writting test.	
<b>Literature:</b> ALBERT,S. Didaktika. Dunajská Streda: LiliuAurum, 2005. 250s. ISBN 8080622523 DILLINGER, M. Kapitoly z didaktiky chémie. - 1. vyd. Bratislava : Slovenské pedagogické nakladateľstvo, 1977. 336 s. VESZPRÉMI,L. Didaktika. - Gyula : APC-Stúdió BT., 2000. 281s. ISBN 963913530X	

PACHMANN,E. Formy a metody výuky chemie - Didaktika III. - 1. vyd. - Praha : Ústřední ústav provzdělávání pedagogických pracovníků, 1976. 137 s.  
 PETLÁK,E. Kapitoly zo súčasnej didaktiky Bratislava: IRIS, 2005.190s. ISBN 8089018890  
 PETLÁK,E. Všeobecná didaktika.- 1. vyd. Bratislava: IRIS, 2004. 316 s. ISBN 80-89018-64-5  
 TUREK,I. Moderné trendy vo výučbe na vysokých školách.- 1. vyd. Komárno : Univerzita J. Selyeho, 2006. 496s. ISBN 80-89234-13-5  
 TUREK,I. Základy didaktiky vysokej školy. Komárno : Selye János Egyetem, 2005. 317s. ISBN 8080733015  
 TUREK,I. Zvyšovanie efektívnosti vyučovania. Bratislava : Metodické centrum, 1997. 316s. ISBN 8088796490

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 19

A	B	C	D	E	FX
31.58	15.79	31.58	10.53	10.53	0.0

**Teacher:** Mgr. Katarína Szarka, PhD.

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ DC2/15	<b>Name:</b> Didactics of Chemistry II.
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered two written tests each of maximum 30 points, while he/she can gather another 40 points with homeworks assigned during the semester. For the successful termination of the course, one has to gather at least 50 points (i.e. 50% of the maximum count of points). For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course, the students will acquire competencies to create complex methodological analysis of selected chapters and create models of knowledge mediation in topics of general and inorganic chemistry in elementary and high school chemistry education	
<b>Brief syllabus:</b> 1. Introduction. Objectives of chemistry as subject in elementary and high school education. 2. Content characterization of general chemistry and inorganic chemistry in upper section of primary education ISCED 2 - and secondary education level. ISCED 3A 3. The cognitive and concept formation process in general and inorganic chemistry in both-primary and secondary -level of education (ISCED2 a ISCED3A) 4. Didactic analysis and interpretation of two topics: "Chemistry around us" and "System of materials" 5. Didactic analysis and interpretation of the follow topics: "Composition of materials" (ISCED 2) and "Chemical bond" (ISCED 3A) 6. Didactic analysis and interpretation of topics: "Structure of atom and ions" (ISCED2, ISCED3A) and "Chemical bond" (ISCED 3A). 7. Didactic analysis and interpretation of themes: "Periodic table of elements"(ISCED 2, ISCED 3A) and "nomenclature of inorganic compounds" (ISCED 3A). 8. Didactic analysis and interpretation of theme: transformation of materials- physical and chemical changes (ISCED 2) 9. Didactic analysis and interpretation of themes: "Course of chemical reactions", "chemical reaction equations and their types" (ISCED 3A). 10. Didactic analysis and inerpretation of themes: protolytic reaction and redox reactions (ISCED 2, ISCED 3A).	

11. Didactic analysis and interpretation of themes: "metals (s-block elements a d-block elements) a nonmetals and metalloids (p-block elements) (ISCED 2, ISCED 3A).  
12. Presentation of final projects.

**Literature:**

DILLINGER, M. Kapitoly z didaktiky chémie. - 1. vyd. Bratislava : Slovenské pedagogické nakladateľstvo, 1977. 336 s.  
KIRJUSKIN, D.M. A kémia tanításának módszertana. Budapest : Tankönyvkiadó, 1963. - 404. - ISBN 0008178  
LEVECSENKO, V.V. A kémia tanítása az iskolában. Budapest : Közoktatásügyi Kiadóvállalat, 1951. – 170s. ISBN 0009897  
PACHMANN, E. Formy a metody výuky chemie - Didaktika III. - 1. vyd. - Praha : Ústřední ústav pro vzdělávání pedagogických pracovníků, 1976. 137 s.

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 20

A	B	C	D	E	FX
15.0	25.0	20.0	20.0	10.0	10.0

**Teacher:** Mgr. Katarína Szarka, PhD.

**Date of last update:** 07.05.2019

**Approved by:** Guarantee Dr. habil. PaedDr. Melinda Nagy, PhD. Guarantee prof. Dr. Péter Tóth, PhD. Guarantee doc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ DC3/15	<b>Name:</b> Didactics of Chemistry III.
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered two written tests each of maximum 30 points, while he/she can gather another 40 points with homeworks assigned during the semester. For the successful termination of the course, one has to gather at least 50 points (i.e. 50% of the maximum count of points). For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course, the students will acquire competencies to create complex methodological analysis of selected chapters and create models of knowledge mediation in topics of organic chemistry and biochemistry in elementary and high school chemistry education	
<b>Brief syllabus:</b> 1. Introduction. Objectives of chemistry as subject in elementary and high school education. 2. Content characterization of organic chemistry and biochemistry in upper section of primary education ISCED 2 - and secondary education level. ISCED 3A 3. The cognitive and concept formation process in bio- and organic chemistry in both-primary and secondary -level of education (ISCED2 a ISCED3A) 4. Didactic analysis and interpretation of follow themes: „Introduction in the organic chemistry“, „types of chemical bonds in the organic compounds “ (ISCED2 a ISCED3A) and „Isomerism“ (ISCED 3A). 5. Didactic analysis and interpretation of theme:“Nomenclature of organic compounds“ (ISCED2 a ISCED3A). 6. Didactic analysis and interpretation of themes: „ Alkanes, alkenes, alkynes (ISCED 2, ISCED 3A) and alkadien“(ISCED 3A). 7. Didactic analysis and interpretation of topics: Natural source of saturated and unsaturated hydrocarbons“ (ISCED 3A). 8. Didactic analysis and interpretation of theme: „Aromatic hydrocarbons“(ISCED 3A). 9. Didactic analysis and interpretation of theme „Hydrocarbon derivates“ (ISCED 2, ISCED 3A). 10. Didactic analysis and interpretation of theme : „Biochemicals of living organisms“ (ISCED 2, ISCED 3A).	

11. Didactic analysis and interpretation of topic: „Quality of life and health“ (ISCED 2, ISCED 3A).  
12. Presentation of final projects.

**Literature:**

DILLINGER, M. Kapitoly z didaktiky chémie. - 1. vyd. Bratislava : Slovenské pedagogické nakladateľstvo, 1977. 336 s.

KIRJUSKIN, D.M.A kémia tanításának módszertana. Budapest : Tankönyvkiadó, 1963. - 404. - ISBN 0008178

LEVECSENKO, V.V. A kémiatanítása az iskolában. Budapest : Közoktatásügyi Kiadóvállalat, 1951. – 170s. ISBN 0009897

PACHMANN, E. Formy a metody výuky chemie - Didaktika III. - 1. vyd. - Praha : Ústřední ústav pro vzdělávání pedagogických pracovníků, 1976. 137 s.

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 17

A	B	C	D	E	FX
23.53	41.18	29.41	0.0	0.0	5.88

**Teacher:** Mgr. Andrea Vargová, PhD.

**Date of last update:** 07.05.2019

**Approved by:** Guarantee Dr. habil. PaedDr. Melinda Nagy, PhD. Guarantee prof. Dr. Péter Tóth, PhD. Guarantee doc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ DEK/15	<b>Name:</b> Assessment for Learning and Assessment of Learning in Chemistry Education
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered a test of maximum 50 points, while he/she can gather another 50 points with homeworks assigned during the semester. For the successful termination of the course, one has to gather at least 50 points (i.e. 50% of the maximum count of points). For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course, the students will acquire theoretical knowledge about assessment process and the assessment trends in modern pedagogy. He/she will be able to implement theoretical knowledge into chemistry teaching process during his/her pedagogical practice.	
<b>Brief syllabus:</b> <ol style="list-style-type: none"><li>1. Introduction. Basic concepts of the assessment process. Assessment forms and methods. Classification process.</li><li>2. The approaches in assessment process. Assessment of Learning(AofL), Assessment for Learning (AfL) and Assessment as Learning (AasL).</li><li>3. Characterization of the Assessment of Learning Process.</li><li>4. Characterization of the Assessment for Learning Process. Assessment for Learning and authentic assessment tools in chemistry education.</li><li>5. Making the Assessment for Learning and authentic assessment tools in chemistry education.</li><li>6. Worksheet with exercises, test questions, problem formulations and their role in chemistry education.</li><li>7. Making worksheet and writing test for chemistry education.</li><li>8. Problem-based tasks in chemistry education.</li><li>9. Selected methods of diagnostic assessment.</li><li>10. Portfolio and e-portfolio in chemistry education.</li><li>11. Presentation and defence of students homework. The final evaluation of the course.</li></ol>	
<b>Literature:</b> AMONASVILI, S.A. Az iskolai értékelés nevelőhatása. 1. vyd. Budapest : Tankönyvkiadó, 1987. 263 s. ISBN 963 18 0358 9 BARABÁSI, T. Tanítás tanulási és tanulás tanulási alapismeretek. 1. vyd. Kolozsvár : Kolozsvári Egyetemi Kiadó, 2008. 231 s. ISBN 978-973-610-704-7	



MAKÁDI, M. A kompetenciaalapú pedagógia : lehetőségei a tanítási-tanulási folyamatban. 1. vyd. Szeged : Mozaik Kiadó, 2009. - 136 s. - ISBN 978 963 697 614 9  
 SLAVÍIK, J. Hodnocení v současné škole : Východiska a nové metody pro praxi. - 1. vyd. - Praha : Portál, 1999. - 190 s. - ISBN 80-7178-262-9  
 TUREK, I. Zvyšovanie efektívnosti vyučovania. Bratislava : Metodické centrum, 1997. 316s. ISBN 8088796490  
 VIDÁKOVICH, T. Diagnosztikus pedagógiai értékelés. Budapest : Akadémiai Kiadó, 1990. 232. ISBN 9630559676  
 ZELINA, M. Stratégie a metódy rozvoja osobnosti : Metódy výchovy. 2. vyd. - Bratislava : Iris, 1996. - 234 s. - ISBN 80-967013-4-7

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 18

A	B	C	D	E	FX
33.33	33.33	0.0	27.78	5.56	0.0

**Teacher:** Mgr. Katarína Szarka, PhD.

**Date of last update:** 07.05.2019

**Approved by:** Guarantee Dr. habil. PaedDr. Melinda Nagy, PhD. Guarantee prof. Dr. Péter Tóth, PhD. Guarantee doc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ DP1/15	<b>Name:</b> Technical and Didactical Aspects of Chemistry Laboratory Practical Education I.
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester the students will be issued two written tests each of maximum 30 points, while another amount of 40 points can be granted for his/her laboratory protocols. The final classification is obtained as the sum of points obtained for the written tests (60%) and from the classification of laboratory protocols (40%). For the final classification to be A one has to acquire 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> After successful completion of the course student can technically and methodologically manage chemical laboratory practice, also acquired skill in implementing demonstration experiments in various form and master the didactic analysis and create models of student experiments in chemistry teaching.	
<b>Brief syllabus:</b> <ol style="list-style-type: none"><li>1. Introduction. Didactical interpretation of occupational safety and health regulation during the chemical laboratory practice</li><li>2. Characterization of school chemical experiments- their types and division. Characterization of student's competencies</li><li>3. Characterization and maintenance of school laboratory equipments , laboratory glassware, aids and chemicals. Terminology of laboratory equipments and technics, and their didactic interpretation in chemistry teaching.</li><li>4. Range and systematization of basic equipments, chemicals in equipment store- administration and updating of chemical inventory .</li><li>5. Development and consolidation of manual skills and habits during the work with chemicals. Didactic interpretation of basic laboratory operations .</li><li>6. Didactic interpretation of demonstration experiments. Demonstration experimets carried out with screening, modeling of chemical experiments using IKT/DT.</li><li>7. Didactic interpretation of student's experiments. Adaptation of project methody and IBST methody. (Inquiry Based Science Teaching).</li><li>8. Experimets realized in the field. „Portable laboratory"and their didactic interpretation.</li><li>9. Implementation of laboratory measuring instruments and computer aided laboratory techniques in the chemistry teaching. The basic principals in good laboratory practice.</li><li>10. Assessment of student's work in chemical laboratory</li></ol>	

## 11. Final evaluation

### Literature:

ČUMOVÁ, K. – PROKŠA, M. Chémia pre 8. a 9. ročník základných škôl . Súbor alternatívnych experimentov k učebnému textu - doplnujúci text pre triedy s rozšíreným vyučovaním matematiky a prírodovedných predmetov. Program PHARE „Obnova vzdelávacieho systému " Inovačný fond 1. vyd.: PROJEKT 041, 1997. 71 s.

DILLINGER, M. Kapitoly z didaktiky chémie. - 1. vyd. Bratislava : Slovenské pedagogické nakladateľstvo, 1977. 336 s.

KIRJUSKIN, D.M. A kémia tanításának módszertana. Budapest : Tankönyvkiadó, 1963. - 404. - ISBN 0008178

LEVECSENKO, V.V. A kémia tanítása az iskolában. Budapest : Közoktatásügyi Kiadóvállalat, 1951. – 170s. ISBN 0009897

LÉVAI, J. Kísérletek könyve. Tessloffés Babilon Kiadó, 2001. 130. ISBN 9639182796

PACHMANN, E. Formy a metody výuky chemie. Didaktika III. 1. vyd. Praha : Ústřední ústav pro vzdělávání pedagogických pracovníků, 1976. 137 s.

ROMANOVÁ, D. Chémia pre 7. ročník základných škôl a 2. ročník gymnázií s osemročným štúdiom . 1. vyd. - Bratislava: EXPOL PEDAGOGIKA, s.r.o., 2010. 79 s. ISBN 978-80-8091-218-5

ROMANOVÁ, D. Chémia pre 6. ročník základných škôl a 1. ročník gymnázií s osemročným štúdiom . 1. vyd. Bratislava: EXPOL PEDAGOGIKA, s.r.o., 2009. 79 s. ISBN 978-80-8091-181-2

RÓZSAHEGYI, M. – WAJAND, J. 575 kísérlet a kémia tanításához. 3. vyd. Budapest : Nemzeti Tankönyvkiadó Rt., 1998. 646 s. ISBN 963 18 8512 7

RÓZSAHEGYI, M. – WAJAND, J. Kémia itt, kémia ott, kémia mindenhol! Budapest : Nemzeti Tankönyvkiadó, 1995. 236. ISBN 9631867919

VICENOVÁ, H. Chémia pre 8. ročník základných škôl a 3. ročník gymnázia s osemročným štúdiom . 1. vyd. Bratislava: EXPOL PEDAGOGIKA, s.r.o., 2011. 112 s. ISBN 978-80-8091-223-9

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

### Notes:

### Evaluation of subjects

Total number of evaluated students: 22

A	B	C	D	E	FX
54.55	13.64	4.55	9.09	0.0	18.18

**Teacher:** Ing. Magdaléna Hugyivárová, Mgr. Andrea Vargová, PhD.

**Date of last update:** 07.05.2019

**Approved by:** Guarantee Dr. habil. PaedDr. Melinda Nagy, PhD. Guarantee prof. Dr. Péter Tóth, PhD. Guarantee doc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ DP2/15	<b>Name:</b> Technical and Didactical Aspects of Chemistry Laboratory Practical Education II.
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 2 <b>For the study period:</b> 26 <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester the students will be issued two written tests each of maximum 30 points, while another amount of 40 points can be granted for his/her laboratory protocols. The final classification is obtained as the sum of points obtained for the written tests (60%) and from the classification of laboratory protocols (40%). For the final classification to be A one has to acquire 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> After successful completion of course student master didactic analysis and through chemical experiments can transfer knowledge of selected thematic units of chemistry for ISCED2 and ISCED3 education, also acquired skill in implementing interesting demonstration experiments and managing students laboratory work. After successful completion of the course the student is able to carry out chemical experiments from everyday life.	
<b>Brief syllabus:</b> <ol style="list-style-type: none"><li>1. Introduction. Basic principals of good laboratory practice. Occupational safety.</li><li>2. Didactic interpretation of school experiments connected with themes chemistry around us (ISCED 2) and system of materials. (ISCED 3A)</li><li>3. Didactic interpretation of experiments from theme: Transformation of materials-physical and chemical changes. (ISCED 2 and ISCED 3).</li><li>4. Didactic interpretation of experiments from topic: Factors affecting the reaction rate. (ISCED 2 and ISCED 3).</li><li>5. Didactic interpretation of experiments : Protolytic reactions (ISCED 2 and ISCED 3).</li><li>6. Didactic interpretation of experiments: redox reactions (ISCED 2 and ISCED 3).</li><li>7. Didactic interpretation of experiments from selected topics of inorganic chemistry (ISCED 2 and ISCED 3).</li><li>8. Didactic interpretation of experiments from selected topics of organic chemistry (ISCED 2 and ISCED 3).</li><li>9. Didactic interpretation of experiments from selected topics of biochemistry. (ISCED 2 and ISCED 3).</li><li>10. Didactic interpretation of experiments from selected topics of analytical chemistry (ISCED 2 a ISCED 3).</li><li>11. Chemical experiments from everyday life and their application in teaching of chemistry.</li></ol>	

## 12. Final evaluation

### Literature:

ČUMOVÁ, K. – PROKŠA, M. Chémia pre 8. a 9. ročník základných škôl . Súbor alternatívnych experimentov k učebnému textu - doplňujúci text pre triedy s rozšíreným vyučovaním matematiky a prírodovedných predmetov. Program PHARE „Obnova vzdelávacieho systému " Inovačný fond 1. vyd.: PROJEKT 041, 1997. 71 s.

DILLINGER, M. Kapitoly z didaktiky chémie. - 1. vyd. Bratislava : Slovenské pedagogické nakladateľstvo, 1977. 336 s.

KIRJUSKIN, D.M. A kémia tanításának módszertana. Budapest : Tankönyvkiadó, 1963. - 404. - ISBN 0008178

LEVECSENKO, V.V. A kémia tanítása az iskolában. Budapest : Közoktatásügyi Kiadóvállalat, 1951. – 170s. ISBN 0009897

LÉVAI, J. Kísérletek könyve. Tessloffés Babilon Kiadó, 2001. 130. ISBN 9639182796

PACHMANN, E. Formy a metody výuky chemie. Didaktika III. 1. vyd. Praha : Ústřední ústav provzdělávání pedagogických pracovníků, 1976. 137 s.

ROMANOVÁ, D. Chémia pre 7. ročník základných škôl a 2. ročník gymnázií s osemročným štúdiom . 1. vyd. - Bratislava: EXPOL PEDAGOGIKA, s.r.o., 2010. 79 s. ISBN 978-80-8091-218-5

ROMANOVÁ, D. Chémia pre 6. ročník základných škôl a 1. ročník gymnázií s osemročným štúdiom . 1. vyd. Bratislava: EXPOL PEDAGOGIKA, s.r.o., 2009. 79 s. ISBN 978-80-8091-181-2

RÓZSAHEGYI, M. – WAJAND, J. 575 kísérlet a kémia tanításához. 3. vyd. Budapest : Nemzeti Tankönyvkiadó Rt., 1998. 646 s. ISBN 963 18 8512 7

RÓZSAHEGYI, M. – WAJAND, J. Kémia itt, kémia ott, kémia mindenhol! Budapest : Nemzeti Tankönyvkiadó, 1995. 236. ISBN 9631867919

VICENOVÁ, H. Chémia pre 8. ročník základných škôl a 3. ročník gymnázia s osemročným štúdiom. 1. vyd. Bratislava: EXPOL PEDAGOGIKA, s.r.o., 2011. 112 s. ISBN 978-80-8091-223-9

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

### Notes:

### Evaluation of subjects

Total number of evaluated students: 18

A	B	C	D	E	FX
66.67	11.11	16.67	5.56	0.0	0.0

**Teacher:** Ing. Magdaléna Hugyivárová, Mgr. Andrea Vargová, PhD.

**Date of last update:** 07.05.2019

**Approved by:** Guarantee Dr. habil. PaedDr. Melinda Nagy, PhD. Guarantee prof. Dr. Péter Tóth, PhD. Guarantee doc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ DTK/15	<b>Name:</b> ICT in Chemistry Education
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered a test of maximum 50 points, while he/she can gather another 50 points with homeworks assigned during the semester. For the successful termination of the course, one has to gather at least 50 points (i.e. 50% of the maximum count of points). For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course, the students will meet the properties and attributes of the information society. They will be able to compare traditional education vs. education in digital age. The student can describe requirements of the information society for the education process. They will be able to characterize the basic components of the selected ICT use for education purpose. The students can implement their IT knowledge into chemistry education process on both ISCED 2 and ISCED 3A level of the education.	
<b>Brief syllabus:</b> 1. Introduction. Comparison attributes of the traditional school and digital school. 2. Description of the information society. History path preview of the information society from the beginning until now. 3. Characterization of the concepts: communication, digitalization, informatization, globalization, the digital competencies - differences between people/students in digital knowledge, the risks of on-line and virtual world, copyright and plagiarism. 4. Cognitive learning theories in digital age. Learning styles changes - digital tools to support learning process. 5. Chemistry and digital competencies, e-learning materials, e-Learning, m-Learning, learning software – characterization. 6. The 1st writing test. 7. Basic tools of ICT. 8. History of ICT. 9. Mobile digital ICT in education. 10. Multimedia – its didactical aspects in chemistry education. 11. Interactive communication during the learning process – social websites, chat, blogging, vlogging etc.	

12. Presentation of students' homework. The final evaluation of the course.					
<b>Literature:</b>					
<b>Language, knowledge of which is necessary to complete a course:</b>					
<b>Notes:</b>					
<b>Evaluation of subjects</b>					
Total number of evaluated students: 19					
A	B	C	D	E	FX
36.84	21.05	10.53	31.58	0.0	0.0
<b>Teacher:</b> Mgr. Katarína Szarka, PhD.					
<b>Date of last update:</b> 07.05.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ FDK/15	<b>Name:</b> Methods of Development of Chemistry Education Didactics
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered a test of maximum 50 points, while he/she can gather another 50 points with homeworks assigned during the semester. For the successful termination of the course, one has to gather at least 50 points (i.e. 50% of the maximum count of points). For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course the students will acquire theoretical and practical knowledge about problem-based learning in generally and in chemistry education. He/she becomes acquainted with the mission and managing of subject oriented competitions in science education in primary and secondary school. The students will be able to do with talented students in chemistry and with student whom weak point is the chemistry as a school subject.	
<b>Brief syllabus:</b> <ol style="list-style-type: none"><li>1. Introduction. Student's personality. Differentiation, individualization and personalization of the learning process in chemistry.</li><li>2. How to approach talented students? How to support talented students' development?</li><li>3. Theoretical classroom problem-based learning in chemistry.</li><li>4. Practical laboratory or outside problem-based learning in chemistry.</li><li>5. The mission and managing of subject oriented competitions in science education in primary and secondary school.</li><li>6. Worksheet example of chemistry olympiad.</li><li>7. Worksheet example of correspondence competitions.</li><li>8. Making chemistry worksheet to support the talented students' development.</li><li>9. Preparation the students for leaving chemistry exam.</li><li>10. How to approach the weak students and support their development in chemistry?</li><li>11. Teaching and lesson plan to support students development in chemistry.</li><li>12. The final evaluation of the course.</li></ol>	
<b>Literature:</b> RÓZSAHEGYI, M. Érettségi felvételi feladatok - Kémia. 1. vyd. Szeged : Mozaik Oktatási Stúdió, 1996. 144 s. ISBN 963 697 017 3	



SILNÝ, P. et al. Úlohy a modely : usmerňovania riešenia úloh zo všeobecnej. 1. vyd. Bratislava : EXPOL pedagogika, spol. s.r.o., 1999. 171 s. ISBN 80-967957-7-5  
VILLÁNYI, A. Ötösöm lesz kémiából : Példatár . 1. vyd. Budapest : Calibra Kiadó, 2002. 231 s. ISBN 963 686 0769  
VILLÁNYI, A. Ötösöm lesz kémiából : Megoldások. 4. vyd. Budapest : Műszaki Könyvkiadó, 1998. 497 s. ISBN 963 1620263  
<http://www.iuventa.sk/sk/Olympiady/Olympiady-a-sutaze/CHO.alej>  
<http://www.equark.sk/index.php?cl=branch&iid=9>

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 19

A	B	C	D	E	FX
42.11	10.53	31.58	10.53	5.26	0.0

**Teacher:** Mgr. Andrea Vargová, PhD.

**Date of last update:** 07.05.2019

**Approved by:** Guarantee Dr. habil. PaedDr. Melinda Nagy, PhD. Guaranteeprof. Dr. Péter Tóth, PhD. Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ IAK/15	<b>Name:</b> Foreign Chemical Extraction of Food-stuffs
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester a writing test is compulsory, when the maximum points are 50. Moreover, another 50 points can be achieved from the essays and project works. The conditions for the successful recognition of the course are the collection of 50 points (maximum points are 50 + 50 = 100), i.e. 50% performance. Grading system: grade A (90–100%), grade B (80–89%), grade C (70–79%), grade D (60–69%), grade E (50–59%), and grade F (49% and below).	
<b>Results of education:</b> After the successful accomplishment of his/her studies, students can utilize his/her knowledge of inorganic and organic chemistry in order to understand the mechanism of the activity of artificial additives which can be found in our foodstuff. He/she will realize what is the aim and importance of the monitoring these artificial additives in our foodstuffs. Students will be able to interpret the relationships between these additives, their quality marks, and he/she will be able to evaluate their positive and negative effects.	
<b>Brief syllabus:</b> 1. The role and importance of chemicals with foreign origins 2. The raw materials of foodstuffs. Their importance, application and utilization for human consumption. The importance of the foodstuff components for our healthy foods. How to prepare our students for healthy life style 3. The human foodchain. The importance of healthy foods in the view of our biological developments 4. The importance of the education of our future chemistry teachers 5. The basic materials of our foodstuffs, their importance and utilization for the humanbody. The importance of the composition of our food in the development of healthy life style of the young generation 6. The importance of the human foodchain. What are the key issues in the view of our biological development 7. The expertise of the chemistryteachers of our future generation 8. The rules of the human foodchain. The importance of food consumption in view of the periods of our biological developments 9. The expertise of the future generations of the chemistry teachers 10. The role of the individuals in the foodchain. The function of foods and their ranking from the view of chemistry education	

11. The most important bioelements, their role in the human body
12. Quality control of our foodstuffs. Personality character of the future generation of chemistry teachers
13. Qualitative characterization of the artificial additives
14. Quantitative characterization of the artificial additives
15. How to detect the natural components of our foodstuff in order to preserve the healthy foodchain for the future generation
16. Characterization and evaluation of the common food additives in the view of chemistry
17. Characterization of artificial additives, their mutagenic, teratogenic and carcinogenic effects from the view of a chemistry teacher
18. The presence of pesticides, herbicides and heavy metals in our foodstuffs, their interactions
19. Foodstuff regulations in Slovakia. Normaccontrols, patent rules. The role of chemistry teachers in the future

**Literature:**

- PRÍBELA, A.: Analýza cudzorodých látok v požívatinách - 1. vyd. - Bratislava : ALFA, Vydavateľstvo technickej a ekonomickej literatúry, n.p., 1974. - ISBN 80 227 0374 5.
- CALOW, P.: Handbook of ecotoxicology - 1. vyd. : Blackwell Science, 1998. - 885 s. - ISBN 0 632 04933 2.
- PÉNZES, B.: Mérgező anyagok a környezetben. Budapest, Mezőgazdasági Kiadó, 1989. ISBN 9 632 34022 1
- KVASNIČKOVÁ, D.: Životné prostredie - 1. vyd. Bratislava: Slovenské pedagogické nakladateľstvo, 2002. 160 s. ISBN 80-08-03341-X
- PRÍBELA, A.: Základy analýzy potravín – Edičné stredisko SVŠT Bratislava, 1977.
- PRUGAR, J., PRUGAROVÁ, A.: Dusičnany v zelenine - Príroda, vydavateľstvo kníh a časopisov, Bratislava 1985. - 152 s.
- TÖLGYESSY, J. a kol.: Chémia, biológia a toxikológia vody a ovzdušia - 2. vyd. Bratislava : VEDA, 1989. 536 s. ISBN 80 224 0034 3

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 18

A	B	C	D	E	FX
33.33	38.89	27.78	0.0	0.0	0.0

**Teacher:** doc. Ing. Ondrej Hegedús, PhD., Ing. Magdaléna Hugyivárová

**Date of last update:** 07.05.2019

**Approved by:** Guarantee Dr. habil. PaedDr. Melinda Nagy, PhD. Guarantee prof. Dr. Péter Tóth, PhD. Guarantee doc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ JCH/15	<b>Name:</b> Nuclear Chemistry
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester a writing test is compulsory: the maximum points are 50. Moreover, another 50 points are available from the mid-term and final projects (maximum points 50 + 50 = 100). The minimum requirement for the successful accomplishment of the course is overall 50 points, i.e. 50% of 100 points. Grading system: grade A (90–100%), grade B (80–89%), grade C (70–79%), grade D (60–69%), grade E (50–59%), and grade F (49% and below).	
<b>Results of education:</b> By successfully finishing this course, students will be familiar with the basis of nuclear and radiochemistry, including the usage and handling of radioactive materials	
<b>Brief syllabus:</b> 1. Elementary particles, nucleus, isotopes, isotones, isobars 2. Radioactivity — basic features, kinetics 3. Types of the radioactive radiation: ###-decay 4. Radioactive decay chains 5. Natural and artificial radioactivity 6. Radiometric dating 7. Detection and measuring radioactivity 8. Interactions of the radioactive decay with matter 9. Consequences of the radioactivity. Dosimetry. Limits and quantities 10. Peaceful utilization of the radioactive decay. Nuclear power station, and their risks 11. Nuclear weapons	
<b>Literature:</b> GREENWOOD, N. N., EARNSHAW, A.: Chemie prvku I a II. ISBN 80 85427 38 9 GREENWOOD, N. N., EARNSHAW, A., A.: Az elemek kémiája II. a III.- Budapest : Nemzeti Tankönyvkiadó, 2004. ISBN 963 19 5255 x GREENWOOD, J.: Activity box - A resource book for teachers of young students : Cambridge University Press, 1997. - 120. - ISBN 0521 49870 8	
<b>Language, knowledge of which is necessary to complete a course:</b>	
<b>Notes:</b>	

**Evaluation of subjects**

Total number of evaluated students: 19

A	B	C	D	E	FX
36.84	31.58	15.79	15.79	0.0	0.0

**Teacher:** Dr. habil. Imre Varga, PhD.**Date of last update:** 07.05.2019**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ KCH/15	<b>Name:</b> Coordination Chemistry
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered two written tests each of maximum 30 points, while he/she can gather another 40 points with homeworks assigned during the semester. For the successful termination of the course, one has to gather at least 50 points (i.e. 50% of the maximum count of points). For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course, the students will acquire knowledge about the structure bonding properties, isomers and classification of coordination complexes.	
<b>Brief syllabus:</b> 1. Chemical Bonds (Ionic, Covalent and Coordinational). 2. Crystal-field Theory. Ligand-Field Theory. 3. Donor-acceptor bonds. The Lewis Theory of Acids and Bases. 4. The Concept of Central Atom and Ligands. The Coordination Number. 5. Classification of Ligands. 6. Pearson's Theory of hard and soft Acids and Bases. 7. Denticity and Hapticity of Ligands. Chelates. 8. Ligand-Field Splitting. The Spectrochemical and nephelauxetic row of Ligands. 9. $\sigma$ - a $\pi$ -coordination. Back-donation. 10. Nomenclature of Coordination Complexes. 11. Isomers of Coordination Complexes. 12. Low-spin and high-spin Complexes. 13. Overview of the most important $\sigma$ - a $\pi$ -complexes.	
<b>Literature:</b> GREENWOOD, N. N., EARNSHAW, A.: Chemie prvku I a II. ISBN 80-85427-38-9 GREENWOOD, N. N., EARNSHAW, A.: Az elemek kémiája II. a III. Budapest : Nemzeti Tankönyvkiadó, 2004 ISBN 963 19 5255 x PLESCH, G., TATIERSKY, J.: Systematická anorganická chémia. 1 vyd. Bratislava : Omega Info, 2004 ( <a href="http://anorganika.fns.uniba.sk/~plesch/Systemanorgchem.pdf">http://anorganika.fns.uniba.sk/~plesch/Systemanorgchem.pdf</a> )	
<b>Language, knowledge of which is necessary to complete a course:</b>	

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 18

A	B	C	D	E	FX
88.89	11.11	0.0	0.0	0.0	0.0

**Teacher:** doc. RNDr. Róbert Gyepes, PhD.

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ KIK/15	<b>Name:</b> Chemical Literature and Sources for The Educational Practice for Teacher
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester a writing test is compulsory: the maximum points are 50. Further 50 points can be collected from project work. The minimum requirement for the successful accomplishment of the course is overall 50 points, i.e. 50% of 100 points. Grading system: grade A (90–100%), grade B (80–89%), grade C (70–79%), grade D (60–69%), grade E (50–59%), and grade F (49% and below).	
<b>Results of education:</b> By successfully finishing this course, students will have a broad overview of the main sources of chemical information. They will have the basic ability in managing the scientific and special expertise in his/her future, pedagogical digital reading–writing carrier. Furthermore, it is very important for the students to be acquainted with the importance of the usage the literature and databases of of the practice of chemistry.	
<b>Brief syllabus:</b> 1. The internet for the chemists 2. Practical usage and application basic monographs (Gmelin, Beilstein, Patai, etc.) for the chemistry teachers of the future 3. Scientific papers and their importance for the chemistry teachers of the future 4. Abstracting literature (Chemical Abstracts) 5. Standards, legal issues, patents 6. Introduction to the chemical databases. Free and paid databases, and their utilization in chemistry teaching 7. Preparation of scientific projects and applications 8. Evaluation of the scientific performance in chemistry 9. Presentation of the results of scientific research — BSc, MSc, scientific papers, seminars, conference presentations (oral and posters) 10. Citations, how to use citation protocols in the practice of the next chemistry teachers 11. Defense of the final project	
<b>Literature:</b> ZELOVÁ, A. et al.: Písanie záverečnej práce. Košice : Technická univerzita v Košiciach, 2001. 48s. ISBN 8070997273 Yecheskel, W.: Hogyan használjuk a kémia irodalmat : Gyakorlati útmutató. ISBN 963 10 6735 1	



Chemical Information Sources ([http://en.wikibooks.org/wiki/Chemical\\_Information\\_Sources](http://en.wikibooks.org/wiki/Chemical_Information_Sources))

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 18

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

**Teacher:** prof. Róbert Mészáros, DSc., Gábor Dibó, PhD.

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ KSM/15	<b>Name:</b> Methodology of Calculuses in Chemistry Education
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered two written tests each of maximum 25 points (it means max. 50 points), while he/she can gather another 50 points with homeworks assigned during the semester. For the successful termination of the course, one has to gather at least 50 points (i.e. 50% of the maximum count of points). For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course, the students will able to do the complex didactical analysis of the learning content “chemical calculuses” and can do preparation for classroom lesson in primary- and secondary education.	
<b>Brief syllabus:</b> 1. Introduction. Didactical analysis of the learning content “chemical calculuses” on ISCED 2 and ISCED 3A level of the chemistry education. 2. Didactical analysis and rendition the learning content Physical-chemical quantities, base quantities (ISQ), units. 3. Didactical analysis and rendition the conceptions: amount of substance, size of an ensemble of elementary entities, relative atomic and molecular mass, volume, relationships between physical quantities. 4. Didactical analysis and rendition the learning content: Calculations bychemical formulas. 5. Didactical analysis and rendition the learning content: solution, mass- and mole fraction. 6. Didactical analysis and rendition the learning content: Molar concentration, molality. 7. The 1st writting test. 8. Didactical analysis and rendition the learning content: volume fraction of the solutions, mixtures contained more components, density of the solutions. 9. Didactical analysis and rendition the learning content: solubility, quantification of the solubility of the ionic compounds in water. 10. Didactical analysis and rendition the learning content: calculations needed to prepare solutions at given concentration. 11. Didactical analysis and rendition the learning content: chemistry calculuses by reaction rates. 12. The 2nd writting test.	

**Literature:**

NÄSER, K.H. Fizikai-kémiai számítások - 2. vyd. Budapest: Műszaki Könyvkiadó, 1971. 411 s.

MARKO, M. Kémiai példák és feladatok - 1. vyd. Bratislava : SPN, 1974. 293s.

NÄSER, K.H. Physikalisch-chemische Rechenaufgaben - 1. vyd. - Leipzig : VEB Deutscher Verlag, 1970. 378 s.

ULICKÁ, L. Příklady zo všeobecnej a anorganickej chémie : Edícia Chemickej literatúry - 1. vyd. Bratislava: ALFA, vydavateľstvo technickej a ekonomickej literatúry, n.p., 1984. 200 s.

VILLÁNYI, A. Kémia. Budapest: Calibra, 1998. ISBN 96 31 62048 4

VILLÁNYI, A. Ötösöm lesz kémiából : Példatár - 1. vyd. Budapest: Calibra Kiadó, 2002. 231 s. ISBN 963 6870769

**Language, knowledge of which is necessary to complete a course:****Notes:****Evaluation of subjects**

Total number of evaluated students: 15

A	B	C	D	E	FX
20.0	13.33	20.0	40.0	6.67	0.0

**Teacher:** Mgr. Katarína Szarka, PhD., Dr. habil. PaedDr. György Juhász, PhD.

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ MAM/15	<b>Name:</b> Motivational and Active Learning Methods in Chemistry Education
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students can gather 60% of the maximum points from the active participation of the course and homeworks, while the remainder 40% of the points can get from project realization and its presentation. For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course, the students will acquire theoretical knowledge about motivational and active learning process and will able to implement their knowledge into their teaching process and further pedagogical practice.	
<b>Brief syllabus:</b> 1. Introduction. The philosophy of LLL. Motivation to LLL. Motive and motivation – its types and their description. The motives to learn chemistry. 2. Constructivism. Classroom lesson by constructivist way – the role of teacher and student. Communication as a motivational, activizational and management tool of teacher . 3. Characterization the active learning methods in chemistry. 4. Simple active learning methods in classroom chemistry lesson. 5. Application of the simple active learning methods in classroom chemistry lesson. 6. Cooperative learning. 7. Application of the cooperative learning methods in chemistry education. 8. Problem-based learning. Problem-based chemistry worksheet. 9. Problem solving models in chemistry education. 10. Characterization of project management – in generaly. Project methods in education. 11. Project-based learning in chemistry. 12. Presentation and defence the students‘ projects. The final evaluation of the course.	
<b>Literature:</b> HEGEDŰS, G. et al. Projektpedagógia. 1. vyd. Kecskemét : Kecskeméti Főiskola Tanítóképző Főiskolai Kar, 2002. 223 s. ISBN 963 7294 42 2 KAGAN, S.- KAGAN, M. Kagan kooperatív tanulás. 1. vyd. Budapest : Önkonet, 2009. 1726 s. ISBN 978-963-86623-5-4 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.	

MAKÁDI, M. A kompetencia alapú pedagógia : lehetőségei a tanítási-tanulási folyamatban. 1. vyd. Szeged : MozaikKiadó, 2009. - 136 s. - ISBN 978 963 697 614 9

MUNDSACK, A. Hogyan tanuljunk? : Kulcs a sikeres tanuláshoz. 1. vyd.: Panem, 2006. 228 s. ISBN 963 545 4309

RADNÓTI, K. A projekt pedagógia, mint az integrált nevelés egy lehetséges eszköze. 1. vyd. Budapest: Educatio Társadalmi Szolgáltató Közhasznú Társaság, 2008. - 330 s. - ISBN 978-963-9795-13-6

RÉTHY, E. Motiváció a tanításiórán. 1. vyd. Budapest : Tankönyvkiadó, 1978. 103 s. ISBN 963 17 3677 6

TOMKOVÁ, Anna et al. Učíme v projektech - 1. vyd. - Praha : Portál, 2009. - 173 s. - ISBN 978-80-7367-527-1

TUREK, I. Zvyšovanie efektívnosti vyučovania. Bratislava : Metodické centrum, 1997. 316s. ISBN 8088796490

ZELINA, M. Aktivizácia a motivácia žiakov na vyučovaní. Prešov: Krajský pedagogický ústav v Prešove, 1991. 73s. ISBN 0006427

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 19

A	B	C	D	E	FX
36.84	26.32	26.32	10.53	0.0	0.0

**Teacher:** Mgr. Katarína Szarka, PhD.

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ OPC/15	<b>Name:</b> Organoelement Chemistry
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester 2 writing tests are compulsory: the maximum points are $2 \times 25 = 50$ . The minimum eligibility requirement for the oral exam is overall 25 points from the two writing tests. The maximum points at the oral exam are 50. The final evaluation comprises both the writing test and oral exam (maximum points $50 + 50 = 100$ ). Grading system: grade A (90–100%), grade B (80–89%), grade C (70–79%), grade D (60–69%), grade E (50–59%), and grade F (49% and below).	
<b>Results of education:</b> After finishing his/her studies, the students became familiar with the atomic structure, bonding theories, and basis of metalorganic chemistry. We will focusing on the practical application of metalorganic compounds, especially their applications in the catalytic processes	
<b>Brief syllabus:</b> 1. History of organometallic chemistry. Discovery of ferrocene 2. Definition of organoelement chemistry 3. Categories of the ligands. 4. Nomenclature of organoelement compounds 5. Geometry of organoelement compounds 6. Nomenclature of organoelement compounds 7. Typical reactions of organoelement compounds 8. Organometallic compounds of non-transition metals 9. Organometallic compounds of transition metals 10. Catalytic reactions of organometallic compounds. Homogeneous and heterogeneous catalysis 11. Organometallic chemistry. Ziegler–Natta catalysts, its discovery	
<b>Literature:</b> GREENWOOD, N. N., EARNSHAW, A.: Chemie prvku I a II. ISBN 80-85427-38-9 GREENWOOD, N. N., EARNSHAW, A.: Az elemek kémiája II. a III. Budapest : Nemzeti Tankönyvkiadó, 2004 ISBN 963 19 5255 x PLESCH, G., TATIERSKY, J.: Systematická anorganická chémia. 1 vyd. Bratislava : Omega Info, 2004 ( <a href="http://anorganika.fns.uniba.sk/~plesch/Systemanorgchem.pdf">http://anorganika.fns.uniba.sk/~plesch/Systemanorgchem.pdf</a> )	
<b>Language, knowledge of which is necessary to complete a course:</b>	

**Notes:****Evaluation of subjects**

Total number of evaluated students: 18

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

**Teacher:** prof. Róbert Mészáros, DSc., Gábor Dibó, PhD.**Date of last update:** 07.05.2019**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ PPX2/15	<b>Name:</b> Pedagogical Practice II.
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week: For the study period:</b> 20s <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Active participation in the teaching practice will be carried out complying with the principles outlined by the UJS PF regulations of teaching practice..	
<b>Results of education:</b> The student will be able to observe, evaluate and analyse the class activity during the teaching practice and the methodology of elementary and secondary school teaching on the basis of the pedagogical-didactic principles applicable at elementary and secondary schools. The student will be able to teach a class independently.	
<b>Brief syllabus:</b> Direct experience of the didactic and educational principles of elementary and secondary education in the actual environment and in actual interaction with learners and students. Observation and analysis of teaching activity. Acquisition of the special methodology of teaching English as a foreign language at the elementary and secondary school level in the light of the contemporary aspects and didactics (based on individual conception). Application of pedagogical approaches focusing on the learners' personality. Expected elements of the applied methodology include creativity, independence, individualization and complementarity.	
<b>Literature:</b> Cooper, R. – Lavery, M. – Rinvoluceri, M.: Video. Oxford: Oxford University Press, 1991. Dudeney, G.: The Internet and the Language Classroom. Cambridge: CUP, 2007. Hyland, Ken: Second Language Writing. Cambridge : University Press, 2010. Madsen, H. S.: Techniques in Testing. Oxford: Oxford University Press, 1983. Silberstein, Sandra: Techniques and resources in teaching reading. Oxford : Oxford University Press, 2003. Ur, Penny: Teaching Listening Comprehension. Cambridge, United Kingdom : Cambridge University Press, 2002. Windeatt, S. – Hardisty, D. – Eastment, D.: The Internet. Oxford: OUP, 2000.	
<b>Language, knowledge of which is necessary to complete a course:</b>	
<b>Notes:</b>	
<b>Evaluation of subjects</b>	



Total number of evaluated students: 9					
A	B	C	D	E	FX
88.89	11.11	0.0	0.0	0.0	0.0
<b>Teacher:</b> prof. Dr. Péter Tóth, PhD.					
<b>Date of last update:</b> 07.05.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ PPX3/15	<b>Name:</b> Pedagogical Practice III.
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week: For the study period:</b> 20s <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Active participation in the teaching practice will be carried out complying with the principles outlined by the UJS PF regulations of teaching practice	
<b>Results of education:</b> The student will be able to observe, evaluate and analyse the class activity during the teaching practice and the methodology of elementary and secondary school teaching on the basis of the pedagogical-didactic principles applicable at elementary and secondary schools. The student will be able to teach a class independently.	
<b>Brief syllabus:</b> Direct experience of the didactic and educational principles of elementary and secondary education in the actual environment and in actual interaction with learners and students. Observation and analysis of teaching activity. Acquisition of the special methodology of teaching English as a foreign language at the elementary and secondary school level in the light of the contemporary aspects and didactics (based on individual conception). Application of pedagogical approaches focusing on the learners' personality. Expected elements of the applied methodology include creativity, independence, individualization and complementarity.	
<b>Literature:</b> <ul style="list-style-type: none"> <li>• Cooper, R. – Lavery, M. – Rinvoluceri, M.: Video. Oxford: Oxford University Press, 1991.</li> <li>• Dudeney, G.: The Internet and the Language Classroom. Cambridge: CUP, 2007.</li> <li>• Hyland, Ken: Second Language Writing. Cambridge : University Press, 2010.</li> <li>• Silberstein, Sandra: Techniques and Resources in Teaching Reading. Oxford : Oxford University Press, 2003.</li> <li>• Ur, Penny: Teaching Listening Comprehension. Cambridge, United Kingdom : Cambridge University Press, 2002.</li> <li>• Windeatt, S. – Hardisty, D. – Eastment, D.: The Internet. Oxford: OUP, 2000.</li> </ul>	
<b>Language, knowledge of which is necessary to complete a course:</b>	
<b>Notes:</b>	
<b>Evaluation of subjects</b> Total number of evaluated students: 10	

A	B	C	D	E	FX
60.0	20.0	20.0	0.0	0.0	0.0
<b>Teacher:</b> prof. Dr. Péter Tóth, PhD.					
<b>Date of last update:</b> 07.05.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ PPX4/15	<b>Name:</b> Pedagogical Practice IV.
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week: For the study period:</b> 40s <b>Methods of study:</b> present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of study:</b> 4.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Active participation in the teaching practice will be carried out complying with the principles outlined by the UJS PF regulations of teaching practice	
<b>Results of education:</b> The student will be able to observe, evaluate and analyse the class activity during the teaching practice and the methodology of elementary and secondary school teaching on the basis of the pedagogical-didactic principles applicable at elementary and secondary schools. The student will be able to teach a class independently.	
<b>Brief syllabus:</b> Direct experience of the didactic and educational principles of elementary and secondary education in the actual environment and in actual interaction with learners and students. Observation and analysis of teaching activity. Acquisition of the special methodology of teaching English as a foreign language at the elementary and secondary school level in the light of the contemporary aspects and didactics (based on individual conception). Application of pedagogical approaches focusing on the learners' personality. Expected elements of the applied methodology include creativity, independence, individualization and complementarity	
<b>Literature:</b> <ul style="list-style-type: none"> <li>• Cooper, R. – Lavery, M. – Rinvolutri, M.: Video. Oxford: Oxford University Press, 1991.</li> <li>• Dudeney, G.: The Internet and the Language Classroom. Cambridge: CUP, 2007.</li> <li>• Hyland, Ken: Second Language Writing. Cambridge : University Press, 2010.</li> <li>• Silberstein, Sandra: Techniques and Resources in Teaching Reading. Oxford : Oxford University Press, 2003.</li> <li>• Ur, Penny: Teaching Listening Comprehension. Cambridge, United Kingdom : Cambridge University Press, 2002.</li> <li>• Windeatt, S. – Hardisty, D. – Eastment, D.: The Internet. Oxford: OUP, 2000.</li> </ul>	
<b>Language, knowledge of which is necessary to complete a course:</b>	
<b>Notes:</b>	
<b>Evaluation of subjects</b> Total number of evaluated students: 17	

A	B	C	D	E	FX
88.24	5.88	5.88	0.0	0.0	0.0
<b>Teacher:</b> prof. Dr. Péter Tóth, PhD.					
<b>Date of last update:</b> 07.05.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ SAM/15	<b>Name:</b> Spectral Methods
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 2 <b>For the study period:</b> 26 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered two written tests each of maximum 25 points. To be allowed for the oral part of the examination, the students will have to gather at least 25 points from both tests (i.e. 50% of the total possible count). The maximum number of points obtainable at the oral part of the exam is 50. The final classification is obtained from the sum of both parts of the examination – written and oral. For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course the students will acquire knowledge about the most common spectral methods used in current research and will get familiar with employing individual methods for selected chemical problems	
<b>Brief syllabus:</b> 1. Introduction to methods for determining the structure of compounds. Qualitative and quantitative analysis. 2. The Electromagnetic field. Electromagnetic radiation and its generation. The spectrum of electromagnetic radiation. 3. Interaction of atoms and molecules with external fields (electric, magnetic and electromagnetic). 4. Emission methods and analysis. 5. Absorption methods and analysis. 6. Thermoanalytical methods. 7. The Zeeman effect. Magnetic resonances. 8. Nuclear spin. Nuclear magnetic resonance. Application of NMR in chemistry and medical practice. 9. Electron spin. Chemistry of radicals. Electron paramagnetic resonance. 10. Electron microscopy. 11. Diffraction methods. Electron and X-ray diffraction. Sources of radiation. Particle accelerators. 12. Single-crystal and powder diffraction.	
<b>Literature:</b> SZABÓ, A.: Analitikai módszerek a klinikai kémiában, Budapest, Akadémiai Kiadó, ISBN 963 05 3395 2	

BRDIČKA, R., DVOŘÁK, J.: Základy fyzikální chemie – 1. vyd. - Praha ACADEMIA, 1977. – 850 s.  
ROSICKÝ J.: Termická analýza , MŠMT ČR Praha, 1989. – 160 s.  
KUŽEL, R.: Advances in Structure Analysis. ISBN 80-901748-6-8  
WALTER, J. MOORE, et al.: Fyzikální chemie - 4. vyd. - Praha SNTL, 1979. - 974 s.  
PATAKI, L., ZAPP, E.: Analitikai kémia - A minőségi és mennyiségi analízis alapjai - 2. vyd. - Budapest Tankönyvkiadó, 1974. – 520 s.

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 20

A	B	C	D	E	FX
30.0	15.0	20.0	15.0	15.0	5.0

**Teacher:** doc. RNDr. Róbert Gyepes, PhD., doc. Ing. Ondrej Hegedús, PhD.

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD. Guaranteeprof. Dr. Péter Tóth, PhD. Guarantee doc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University					
<b>Name of the faculty:</b> Faculty of Education					
<b>Code:</b> KCH/CHdm/SSM/15		<b>Name:</b> Chemistry Teaching Theory and Practice			
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> <b>Recommended extent of course ( in hours ):</b> <b>Per week: For the study period:</b> <b>Methods of study:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of study:</b>					
<b>Level of study:</b> II.					
<b>Prerequisites:</b> KCH/CHdm/DTK/15 and KCH/CHdm/DC1/15 and KCH/CHdm/JCH/15 and KCH/CHdm/TCV/15 and KCH/CHdm/MAM/15 and KCH/CHdm/CDS/15 and KCH/CHdm/DC2/15 and KCH/CHdm/DP1/15 and KCH/CHdm/KCH/15 and KCH/CHdm/SAM/15 and KCH/CHdm/DC3/15 and KCH/CHdm/DEK/15 and KCH/CHdm/DP2/15 and KCH/CHdm/KIK/15 and KCH/CHdm/OPC/15 and KCH/CHdm/PPX4/15					
<b>Conditions for passing the subject:</b> Oral answer of student evaluated by the Commission for state exams. Final evaluation: A - 100-90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.					
<b>Results of education:</b> Through the subjects of the specialization, the graduate of the study programme Teacher Training in Chemistry (combined) masters the basic content of the disciplines of the specialization. The graduate is able to deal with this content as the product of human (scientific) activity and is able to design didactic intents and purposes in this context. In addition to managing teaching competences the graduate is able to participate in the development of methodological materials for teaching chemistry.					
<b>Brief syllabus:</b> Selected chapters from Chemistry Disciplines. General and Special methodology of teaching chemistry.					
<b>Literature:</b> The suggested literatures available within information paper of the obligatory subjects.					
<b>Language, knowledge of which is necessary to complete a course:</b> Slovak and Hungarian language					
<b>Notes:</b>					
<b>Evaluation of subjects</b> Total number of evaluated students: 16					
A	B	C	D	E	FX
43.75	25.0	12.5	12.5	6.25	0.0
<b>Teacher:</b>					



**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ TCV/15	<b>Name:</b> Chemical Structures and Theory of Chemical Bond
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture / Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 2 / 1 <b>For the study period:</b> 26 / 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered two written tests each of maximum 25 points. To be allowed for the oral part of the examination, the students will have to gather at least 25 points from both tests (i.e. 50% of the total possible count). The maximum number of points obtainable at the oral part of the exam is 50. The final classification is obtained from the sum of both parts of the examination – written and oral. For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Upon successful completion of the course the students will acquire knowledge about the electron structure of atoms and molecules and about the quantum-chemical description of chemical bonds. Students will also be familiar with the role of symmetry in chemistry and basic of group theory	
<b>Brief syllabus:</b> <ol style="list-style-type: none"><li>1. Axioms of Quantum Theory.</li><li>2. Quantum numbers. The Pauli Exclusion Principle.</li><li>3. Time-independent and time-dependent Schrödinger equation.</li><li>4. The Born-Oppenheimer approximation. The Variational Principle.</li><li>5. Valence-Bond Theory.</li><li>6. MO LCAO. SCF.</li><li>7. Delocalized and localized Orbitals. Bonding, non-bonding and antibonding Molecular Orbitals. Hypo- and hypervalent molecules. Multicentre bonds. Classification of MO's — <math>\sigma</math>-, <math>\pi</math>- a <math>\delta</math>-MO.</li><li>8. Methods of DFT.</li><li>9. Hypersurface of Potential Energy and its Role in Chemistry. Transition States. Excited States of Molecules.</li><li>10. Multiconfigurational Methods in Theoretical Chemistry.</li><li>11. Relativistic Effects in their Importance in Chemistry.</li><li>12. Symmetry in Chemistry. Symmetry Elements and Operations. Axioms of Group Theory. Reducible and Irreducible Representations.</li><li>13. Point Groups. Space Groups. Group Notations — Schönflies and Hermann-Mauguin.</li><li>14. Direct Product of Representations. Selection Rules in Spectroscopy.</li></ol>	
<b>Literature:</b>	

ČÁRSKY P., PANCÍŘ J., ZAHRADNÍK R.: Molekulové orbitály v chemii. Academia Praha, 1974. – 140 s.  
FIŠER J.: Úvod do kvantové chemie. Academia Praha, 1983. – 247 s.  
HAVLAS Z., ZAHRADNÍK R.: Řešené úlohy z chemické reaktivity. Academia Praha, 1987. – 193 s.  
LOUB J.: Krystalová struktura, symetrie a rentgenová difrakce: UK Praha, 1987. – 142 s.  
KYSEL O.: Elektronová struktúra molekulových systémov I. ISBN 80-8050-763-5.  
ULICKÝ, L.: Štruktúra tuhej fázy. SVŠCHT, 1972. – 128 s.

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 19

A	B	C	D	E	FX
42.11	21.05	10.53	0.0	26.32	0.0

**Teacher:** doc. RNDr. Róbert Gyepes, PhD.

**Date of last update:** 07.05.2019

**Approved by:** Guarantee Dr. habil. PaedDr. Melinda Nagy, PhD. Guarantee prof. Dr. Péter Tóth, PhD. Guarantee doc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ TKT/15	<b>Name:</b> Planning and Realization of Chemical School Projects and Excursions
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week: For the study period:</b> 20s <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester, the students will be delivered a test of maximum 50 points, while he/she can gather another 50 points with homeworks assigned during the semester. For the successful termination of the course, one has to gather at least 50 points (i.e. 50% of the maximum count of points). For the final classification to be A one has to obtain 90-100% of the total points, for B 80-89%, for C 70-79%, for D 60-69% and for E 50-59%.	
<b>Results of education:</b> Student after successful completion of learning process will be able to creatively plan and implement excursions, also gains knowledge in project management which will be able to apply in practice of future chemistry teacher. It strengthens the sense of responsibility in relation to healthy lifestyle and perception of the aesthetic values of environment. It deepens, develops and reinforces the scale of value of the future teacher in environment education. The active participation in seminars form the personality of the future teacher of chemistry , develop the ability to cooperate in group , divide tasks and take responsibility.	
<b>Brief syllabus:</b> <ol style="list-style-type: none"><li>1. Basics of project management.</li><li>2. Phase of project –incubation phase and project planning .</li><li>3. Phase of project – execution and presentation of project</li><li>4. Phase of project– evaluation and correction of project</li><li>5. Excursion as an option of meaningful learning of chemistry.</li><li>6. Excursion as a tool of practical education.</li><li>7. Preparation for the excursion and explore possibilities and conditions of educational influences.Preparation of thematical excursion.</li><li>8. Organizational and technical aspects of chemical themed excursions</li><li>9. Planning process of chemical excursions. Making time-theme schedule.</li><li>10. Realization process of chemical excursion.</li><li>11. Evaluation of participation in thematical excursions.</li><li>12. Proceeds of excursion for the future teachers of chemistry</li><li>13. Advantages and disadvantages of domestic and foreign excursions.</li></ol>	
<b>Literature:</b>	

KALHOUS, Zd.: Školní didaktika. 2. vyd. - Praha : Portál, 2009. - 448 s. - ISBN 978 80 7367 571 4

DILLINGER, M. a kol.: Kapitoly z didaktiky chémie. 1. vyd. - Bratislava : Slovenské pedagogické nakladateľstvo, 1977. - 336 s.

BAUER, M. et al.: Környezetismeret. Dinasztia Tankönyvkiadó, 2001. - 80. - ISBN 00 115 01

PASCH, M. et al.: Od vzdělávacího programu k vyučovací hodině : Jak pracovat s kurikulem. 1. vyd. - Praha : Portál, s.r.o., 1998. - 416 s. - ISBN 80 7367 054 2

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 15

A	B	C	D	E	FX
60.0	6.67	20.0	13.33	0.0	0.0

**Teacher:** Ing. Magdaléna Hugiivárová, Mgr. Andrea Vargová, PhD.

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ VFE/15	<b>Name:</b> Selected Chapters from Environmental Chemistry
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester a writing test is compulsory: the maximum points are 50. Further 50 points can be collected from project work. The minimum requirement for the successful accomplishment of the course is overall 50 points, i.e. 50% of 100 points. Grading system: grade A (90–100%), grade B (80–89%), grade C (70–79%), grade D (60–69%), grade E (50–59%), and grade F (49% and below).	
<b>Results of education:</b> After the successful accomplishment of his/her studies, students will become familiar with the basic role of the environmental factors and their structure. He/she will be able to characterize the connections between the organisms and between the humans and her environments. Due to the chemical education he/she can apply this knowledge for the formation and protection of the environment at local, regional and international level. He/she will get an overview on the present state of the environmental issues in this country, and about the future changes. He/she can evaluate the importance of sustainability, as the positive perspectives of our society. He/she can apply this knowledge in chemical education in the form of pedagogical practice.	
<b>Brief syllabus:</b> 1. Chemistry is an important part of natural sciences. It is an important link between the humans and their environment 2. The effect of chemistry on human life 3. Evaluation of the environment and its components. Characterization of the soil, water, and air, based on chemical principles 4. The characteristic physical and chemical parameters of our environment 5. The sources of the contaminations, their chemical characterization 6. The most important polluting materials in the air, water and soil. 7. Technologies, used for the determination of soil contaminations and methods for its cleaning 8. Instrumentations and methods used for water purifications 9. Instrumentations and methods used for the air purifications 10. Characterization of the industrial and domestic trash from the viewpoint of organic chemistry 11. Neutralization and recycling. Chemical characterization from the viewpoint of environmental friendly processes 12. The legal actions and the environmental protection laws in Slovakia	

### 13. Relationships of the local and global environmental factors, the responsibility of the individuals

**Literature:**

- TÖLGYESSY, J. a kol.: Chémia, biológia a toxikológia vody a ovzdušia - 2. vyd. Bratislava : VEDA, 1989. 536 s. ISBN 80 224 0034 3
- ÁBRAHÁM, K.: Környezetünk jövője-1. vyd. Budapest: Kossuth Könyvkiadó, 1986. 139s. ISBN 963 09 2892 2
- BÁNDI, GY.: Hulladékgyűjtési kézikönyv I.-1. vyd. Budapest: KJK, 2002. 348 s. ISBN 963 224643 8
- HOLÉCZYOVÁ, G. et al.: Hygiena životného prostredia - 1. vyd. Košice : Univerzita Pavla Jozefa Šafárika, 2011. 201s. ISBN 978 80 7097 892 4
- HORVÁTHNÉ-PAPP, I.: Integrált környezetvédelem : Módszertani segédlet tanórákhoz és tanórán kívüli környezeti nevelési tevékenységekhez - 1. vyd. Budapest: Pont Kiadó, 2001. 112 s. ISBN 963 9312 44 4
- KLINDA, J. :Správa o stave životného prostredia Slovenskej republiky v roku 2010 . 1. vyd. Bratislava: Ministerstvo životného prostredia Slovenskej republiky, 2011. 192 s. ISBN 978-80-89503-19-3
- KOVÁTS-NÉMETH, M.: Együtt a környezetért- 1. vyd. : Palatia Nyomda és Kiadó Kft, 2011. 350s. ISBN 978-963-7692-35-2
- KVASNIČKOVÁ, D.: Životné prostredie - 1. vyd. Bratislava: Slovenské pedagogické nakladateľstvo, 2002. 160 s. ISBN 80-08-03341-X
- MAKLÁRI, J.- KRISKA,GY.: Különleges probléma a szemét - 1. vyd. : Flaccus, 2002. 63s.

**Language, knowledge of which is necessary to complete a course:****Notes:****Evaluation of subjects**

Total number of evaluated students: 18

A	B	C	D	E	FX
94.44	5.56	0.0	0.0	0.0	0.0

**Teacher:** doc. Ing. Ondrej Hegedűs, PhD., Ing. Magdaléna Hugyivárová

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/CHdm/ VFK/15	<b>Name:</b> Selected Chapters from Chemistry
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> During the semester a writing test is compulsory: the maximum points are 50. Further 50 points can be collected from project work. The minimum requirement for the successful accomplishment of the course is overall 50 points, i.e. 50% of 100 points. Grading system: grade A (90–100%), grade B (80–89%), grade C (70–79%), grade D (60–69%), grade E (50–59%), and grade F (49% and below).	
<b>Results of education:</b> By absolving this course, students will become familiar with the basics of macromolecular chemistry and bioinorganic chemistry and this knowledge can be utilized for practical aspects as well.	
<b>Brief syllabus:</b> <ol style="list-style-type: none"><li>1. The basics of macromolecular chemistry</li><li>2. The nomenclature of polymers</li><li>3. The tacticity of polymers</li><li>4. Basic reactions of the macrocyclic compounds</li><li>5. Characterization of the polymers, molecular weight distribution</li><li>6. Utilization of the polymers</li><li>7. Inorganic polymers</li><li>8. Basics of bioinorganic chemistry</li><li>9. Enzymology. Biocatalysis</li><li>10. Biogenic elements. The role of special metals in living systems</li><li>11. Toxicity of the heavy metals, the mechanism of their action</li><li>12. The cisplatin and its application as a drug. The complexes of gold</li><li>13. Contrast materials for MRI</li></ol>	
<b>Literature:</b> ZSUGA M.: Makromolekuláris kémia. Debrecen, Kossuth Egyetemi Kiadó, 2003. - 130 s. ISBN 0013778 GREENWOOD, N. N., EARNSHAW, A.: Chemie prvků I a II. ISBN 80 85427 38 9 GREENWOOD, N. N., EARNSHAW, A., A.: Az elemek kémiája II. a III.- Budapest : Nemzeti Tankönyvkiadó, 2004. ISBN 963 19 5255 x	



GREENWOOD, J.: Activity box - A resource book for teachers of young students : Cambridge University Press, 1997. - 120. - ISBN 0521 49870 8

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

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 16

A	B	C	D	E	FX
37.5	56.25	6.25	0.0	0.0	0.0

**Teacher:** Dr. habil. PaedDr. György Juhász, PhD., Mgr. Andrea Vargová, PhD.

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KCH/KCH/ CHdm/PDO/15	<b>Name:</b> Thesis and Its' Defens
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> <b>Recommended extent of course ( in hours ):</b> <b>Per week: For the study period:</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 4	
<b>Recommended semester/trimester of study:</b>	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Complete elaboration of the thesis. Positive review from the supervisor and the opponent. Successful defens of the thesis.	
<b>Results of education:</b> Student will be able to work in his/her profession creatively, independently will acquire theoretical and practical knowledge about the current science results and implement them to solve the thesis problem. He/she can evaluate the result of his/her research, make conclusion and describe the proceeds and practical benefit of the thesis. By the independently elaboration of the thesis the student proves his/her ability to work with chemical literature and sources. Student will able to defend his/her thesis.	
<b>Brief syllabus:</b> 1. Administration and type of the thesis. 2. The structure of the thesis. 3. Formating and layout of the thesis. 4. Citation and bibliografia, literature and information sources. 5. Selected tasks of the thesis and theirs current theoretical background. 6. Formulation of the hypotesis, aims and tasks. 7. Research methodics. 8. Analyses of the research results and its' processing and interpretation. 9. Conclusion and appendix. 10. The thesis submit, licence contract, honorary statement.	
<b>Literature:</b> Smernica rektora Univerzity J. Selyeho Komárno o úprave, registrácii, sprístupnení a archivácii záverečných prác na Univerzite J. Selyeho. - Vždy aktuálne vydanie Smernice KATUŠČÁK, D. (2008) : Ako písať záverečné a kvalifikačné práce. - 5. vyd. - Nitra : Enigma, 164 s. - ISBN 978 80 89 132 45 4 ALBERT, S. (2001) : Písanie záverečnej práce. Košice, Technická univerzita – 47 s. - ISBN 80 709 9727 3	
<b>Language, knowledge of which is necessary to complete a course:</b>	

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 11

A	B	C	D	E	FX
54.55	27.27	18.18	0.0	0.0	0.0

**Teacher:**

**Date of last update:** 07.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/ OKB2/18	<b>Name:</b> Professional Conversation for Biologists 2
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 2., 4.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b>	
<b>Results of education:</b> Összesen: 100 pontot lehet szerezni Értékelés: A – 100 - 90%, B – 89 - 80%, C – 79 - 70%, D – 69 - 60%, E – 59 - 50%. 0–49 = FX.	
<b>Brief syllabus:</b> Professional converstations: Anthropology, Didactics of biology, Ecology, Genetics, Geology, Microbiology, Mineralogy.	
<b>Literature:</b> DEMO, M. a kol. Zákklady poľnohospodárstva. Vyd.: SPU, 2005, 145 s. ISBN 80-8069-598-9. ĎUĎA, R. – OZDÍN, D. Minerály Slovenska. Vyd. GRANIT, s.r.o. 2012, 480 s. ISBN 978-80-7296-086-6. HUDECOVÁ, D. – ŠIMKOVIČ, M. Mikrobiológia. Vyd. STU, 2011, 266 s. ISBN 9788022736008. KOŠŤÁK, M. Dávný svět zkamenělin. Vyd.: Nakladatelství Granit 2004, 288 s. ISBN 80-7296-030-X. MAKOVICKÝ, P.: A mezőgazdaság alapjai: Állattenyésztés. 1. vyd. Komárno: Univerzita J. Selyeho, 2015. 94 s. ISBN 978-80-8122-139-2. NAGY, M. Humánbiológia. Vyd.: Lilium Aurum, Dunajská Streda, 2006, 250 s. ISBN 80-8062-283-3. NAGY, M. Humánökológia. Vyd.: UJS, Komárno, 2012, 188 s. ISBN 978-80-8122-056-2. PENROSE, L.S. – STOHL, G. A humánogenetika alapjai. Budapest, 1967, 200 s. PORÁČOVÁ, J. – NAGY, M. – ZAHATŇANSKÁ, M. Biometria živočíchov a človeka. Vyd.: Prešov Fakulta humanitných a prírodných vied PU v Prešove, 2011, 357 s. ISBN 978-80-555-0475-9. TULENKOVÁ M. Didaktika biológie I. Vyd.: Prešov: FHPV PU, 2006, 155 s. ISBN 80-8068-467-7. TULENKOVÁ M. Didaktika biológie II. Vyd.: Prešov: FHPV PU, 2006, 119 s. ISBN 80-8068-468-5.	
<b>Language, knowledge of which is necessary to complete a course:</b> hungarian, slovak	

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 5

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

**Teacher:**

**Date of last update:** 30.04.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KBIO/ POZ/15	<b>Name:</b> Health Promoting
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week: 1 For the study period: 13</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> I., II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Continuous assessment of studies - 50%, oral exam - 50%. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.	
<b>Results of education:</b> After completing the course the student knows the basic concepts, principles and programs of health promotion.	
<b>Brief syllabus:</b> Health behavior in children and adults in the European Union, with particular reference to Slovakia. Summary of terms and documents related to health education and health promotion. Characteristics of countrywide health promotion. Preparation of Health Promotion Programme, the role of health education by age groups.	
<b>Literature:</b> Pikó Bettina. 2007. A pozitív gondolkodás szerepe az egészség megtartásában. In: Kállai János, Varga József, Oláh Attila (szerk.): Egészségpszichológia a gyakorlatban Budapest, Medicina Könyvkiadó Zrt. Barabás Katalin (szerk.) (2006): Egészségfejlesztés - Alapismeretek pedagógusok számára, Medicina Könyvkiadó Zrt., 2006 Darvai Sarolta (szerk.): Tanulmányok a gyermekkori egészségfejlesztés témakörben, Eötvös Loránd Tudományegyetem, 2012, <a href="http://old.tok.elte.hu/kutatokozpont/node/42">http://old.tok.elte.hu/kutatokozpont/node/42</a> Langford R, Bonell CP, Jones HE, Poulou T, Murphy SM, Waters E, Komro KA, Gibbs LF, Magnus D, Campbell R. (2014): The WHO Health Promoting School framework for improving the health and well-being of students and their academic achievement (Review), TheCochrane Library 2014, Issue 4, <a href="http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD008958.pub2/pdf">http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD008958.pub2/pdf</a>	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian or Slovak	
<b>Notes:</b>	
<b>Evaluation of subjects</b>	

Total number of evaluated students: 25					
A	B	C	D	E	FX
96.0	0.0	4.0	0.0	0.0	0.0
<b>Teacher:</b> Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD.					
<b>Date of last update:</b> 30.04.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ HPP/15	<b>Name:</b> Formulation and evaluation of educational programs
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> The course concludes with an assessment. The student assessment during the semester is an independent work, for which can receive 60 points. The semester final assessment is to protect this work, for which can get 40 points. The ratings scale: A - 90 100% B - 80% -89 C - -79 70%, D - 60 to 69%, E - 50 -59%.	
<b>Results of education:</b> Students will be able to: -understand and tell the steps the preparation of educational programs - apply these steps in practical tasks - to evaluate the quality of an educational program.	
<b>Brief syllabus:</b> The concept and elements of the educational program. Steps to elaborate the project. Project-design methods and tools. The analysis of needs and target groups. Education goals as a basis for planning. Taxonomy of educational objectives in the preparation of educational programs. The evaluation as a part of the educational program. The curriculum and syllabus preparation, limiting factors.	
<b>Literature:</b> Prášilová Michaela. Tvorba vzdelávacieho programu. - 1. vyd. - Praha : TRITON, 2006. - 191 s. - ISBN 80-7254712-7. Pasch, Marvin, Gardner, Trevor G. Od vzdelávacieho programu k vyučovacím hodinám : Jak pracovat s kurikulem. - 1. vyd. - Praha : Portál, s.r.o., 1998. - 416 s. - ISBN 80-7367-054-2. HORVÁTHOVÁ, Kinga. A szlovákiai oktatáspolitikának néhány kiemelt szempontja. In: A jogtudatosság, mint az egészséges életmód része. Komárno: Univerzita J. Selyeho, 2015, CD-ROM, p. 7-13. ISBN 978-80-8122-157-6. HORVÁTHOVÁ, Kinga. A szlovákiai oktatáspolitikának aktuális lépései. Katedra. Évf. 24, sz. 9 (2017), p. 10-11. ISSN 1335-6445.	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian and Slovak Language	
<b>Notes:</b>	
<b>Evaluation of subjects</b> Total number of evaluated students: 226	



A	B	C	D	E	FX
28.32	13.72	19.03	13.72	25.22	0.0
<b>Teacher:</b> prof. Dr. Krisztián Józsa, PhD.					
<b>Date of last update:</b> 09.05.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ KSA/15	<b>Name:</b> Cultural and Social Anthropology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Final test. Condition for successful completion of this course is to obtain at least 50% of the maximum possible assessment of the subject. Evaluation: A - 90 -100%, B - 80% -89 C - -79% 70, D - 60-69%, E - 50 -59%.	
<b>Results of education:</b> If students fulfill the subject they will have suitable knowledge about the study of ethnography. They will get practical competences too, which they can apply in their future pedagogical practices.	
<b>Brief syllabus:</b> What is ethnography? What does cultural and social anthropology mean? What is European ethnology? The description of the Hungarian folk art, a short historical review of European ethnography and ethnology, the sources of ethnography and its search manners, the possibilities of the assessment of several searches (construction or reconstruction?). Summary: the possibilities of its usage in the educational practice.	
<b>Literature:</b> Balassa Iván–Ortutay Gyula: Magyar néprajz. Budapest: Corvina Kiadó 1979. Liszka József: Bevezetés a néprajzba. A magyar néprajz/ európai etnológia alapjai. Dunaszerdahely: Lilium Aurum 2006 Liszka József: Átmenetek. Folklór és nem-folklór határán. Komárom: Selye János Egyetem Tanárképző Kara 2013 /Monographiae Comaromienses 12./ Magyar néprajzi lexikon 1–5. Budapest: Akadémiai Kiadó 1977–1982. Tradičná ľudová kultúra Slovenska slovom a obrazom. Elektronická encyklopédia ( <a href="http://www.ludovakultura.sk/index.php?id=11">http://www.ludovakultura.sk/index.php?id=11</a> ) Voigt Vilmos: Alapismereti bevezetés a néprajz iránt érdeklődő hallgatóknak. Debrecen: Kossuth Lajos Tudományegyetem Néprajzi Tanszék 1989 /Néprajz egyetemi hallgatóknak 1./ STRÉDL, Terézia. Konfliktusoldás és -megoldás, az interkulturális kölcsönhatások tükrében. In: Történelmi traumáink kezelési lehetőségei lélektani megközelítésben. Székesfehérvár: Kodolányi János Főiskola, 2015, P. 221-256. ISBN 978-615-5075-26-1.	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian and Slovak Language	

**Notes:****Evaluation of subjects**

Total number of evaluated students: 289

A	B	C	D	E	FX
37.02	20.42	18.34	11.76	11.42	1.04

**Teacher:** Dr. habil. PhDr. József Liszka, PhD.**Date of last update:** 09.05.2019**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ MEP/15	<b>Name:</b> Methodology of pedagogical research
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Developing a research plan and defending it – evaluation: a maximum of 50 points, successfully passing a test – evaluation: a maximum of 50 points, cumulative performance evaluation: 100-90 points/A, 89-90 points/B, 79-70 points/C, 69 – 60 points/D, 59 – 50 points/E, less than 50 points/ Fx	
<b>Results of education:</b> Students should be able to develop a research plan, be familiar with the research methodology, formulate hypotheses and research questions, realize a research and evaluate its data relevantly.	
<b>Brief syllabus:</b> Research and its environment. The methodology of research. Pedagogical research: quantitative and qualitative methods. Project techniques. Triangulation, validity, reliability. Setting the aim of the research, formulating hypotheses and research questions. The procedure of the research plan. Realizing and evaluating the research	
<b>Literature:</b> Albert Sándor: A pedagógiai kutatások alapjai. Dunaszerdahely : Lillium Aurum, 2005.100 s. ISBN 8080622817 Gavora Peter: Elektronická učebnica pedagogického výskumu. www.e-metodologia.fedu.uniba.sk Falus Iván: Bevezetés a pedagógiai kutatás módszereibe. Budapest : Keruban Könyvkiadó, 1993. 540 s. Silverman David: Ako robiť kvalitatívny výskum. Bratislava : Ikar. 2005. 328 s. ISBN 8055109044 Švec Štefan: Metodológia vied o výchove : Kvantitatívno-scientické a kvalitatívno-humanitné prístupy v edukačnom výskume. Bratislava : IRIS, 1998. 303 s. ISBN 8088778735 TÓTH, Péter. Tanulási stílus vizsgálata a szakképzésben. In: Empirikus kutatások a szakmai pedagógusképzésben. Székesfehérvár: DSGI, 2013, P. 78-115. ISBN 978-963-89747-1-6. TÓTH, Péter. A tanulókhöz adaptált szakoktatás ismeretelméleti alapjai. In: Egyéni különbségek szerepe a tanulásban és a pályaválasztásban. Székesfehérvár: DSGI, 2015, P. 21-59. ISBN 978-963-89747-4-7. TÓTH, Péter, Enikő MAJOR, István SIMONICS, Jenő DUCHON a Anikó VARGA. Pedagógiai kutatások a Kárpát-medencében: 2. Kárpát-medencei Oktatási Konferencia. 1. vyd. Budapest: Óbudai Egyetem, 2017. 506 s. ISBN 978-963-449-026-5.	

<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian and Slovak Language					
<b>Notes:</b>					
<b>Evaluation of subjects</b> Total number of evaluated students: 438					
A	B	C	D	E	FX
27.4	20.78	15.75	15.75	16.44	3.88
<b>Teacher:</b> Dr. habil. Ing. István Szókö, PhD.					
<b>Date of last update:</b> 03.06.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ PDI/15	<b>Name:</b> Educational diagnostics
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture / Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 / 1 <b>For the study period:</b> 13 / 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Final test. Condition for successful completion of this course is to obtain at least 50% of the maximum possible assessment of the subject. Evaluation: A - 90 -100%, B - 80% -89 C - -79% 70, D - 60-69%, E - 50 -59%.	
<b>Results of education:</b> Student acquires basic concepts: control, assessment. Understand the features of pedagogical assessment. Be able to (i) reflect on pedagogical assessment in function of educational concept, (ii) apply in pedagogical practice. Understand and apply theory, methods, forms and principles of pedagogical assessment.	
<b>Brief syllabus:</b> Control and assessment in education – determining basic concepts. Concept of educational process and quality change of learning. Concepts of teaching and its process. Personality of teacher. Functions and dimensions of pedagogical assessment. Educational concepts and assessment. Process, methods and forms of pedagogical assessment. Meso level of assessment. External and internal control and assessment.	
<b>Literature:</b> Horváthová, Kinga. Kontrola a hodnotenie v školskom manažmente. - 1. vyd. - Bratislava : Wolters Kluwer, 2010. - 106 s. - ISBN 978-80-8078-329-7. Horváthová, Kinga., Szókö István. Kontrola a hodnotenie žiackych výkonov v národnostných školách na Slovensku. - 1. vyd. - Komárno : Pedagogická fakulta Univerzity J. Selyeho, 2013. - 120 s. - ISBN 978-80-8122-083-8. Gavora, Peter. Akí sú moji žiaci? - 3. vyd. - Nitra : Enigma, 2011. - 222 s. - ISBN 978-80-89132-91-1. Bertalané Zágón. Értékelés osztályozás nélkül : I . - Budapest : Nemzeti Tankönyvkiadó, 2001. - 92 s. - ISBN 9631923312. Falus, Iván. Didaktika. - Budapest : Nemzeti Tankönyvkiadó, 2003. - 552 s. - ISBN 9631952967. Falus Iván et all. A pedagógusok pedagógiája. - Budapest : Nemzeti Tankönyvkiadó, 2001. - 355 s. - ISBN 963191805x. Falus Iván. A tanárrá válás folyamata. - 1. vyd. - Budapest : Gondolat, 2007. - 245 s. - ISBN 978 963 9610 97 2. SZARKA, Katarína. Súčasný trendy školského hodnotenia: Koncepcia rozvíjajúceho hodnotenia. 1. vyd. Komárom: Kompres, 2017. 147 s. [5,76 AH]. ISBN 978-963-12-9692-1.	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian and Slovak Language	

**Notes:****Evaluation of subjects**

Total number of evaluated students: 829

A	B	C	D	E	FX
25.09	24.37	20.14	14.35	13.99	2.05

**Teacher:** Dr. habil. Ing. István Szőköl, PhD., Dr. habil. PaedDr. Kinga Horváth, PhD.**Date of last update:** 09.05.2019**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ PEP/15	<b>Name:</b> Educational psychology
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Final test. Condition for successful completion of this course is to obtain at least 50% of the maximum possible assessment of the subject. Evaluation: A - 90 -100%, B - 80% -89 C - -79% 70, D - 60-69%, E - 50 -59%.	
<b>Results of education:</b> Student has acquired bipolarity and psychological principles of teaching and learning, effective model of learning and application of differentiation for student's success in the school.	
<b>Brief syllabus:</b> Educational psychology as the specific discipline of psychology – defining the basic concepts. Bipolarity of the educational process. Educational impact and indicators. Optimalizational learning process. Principles of learning. Interest and memory as indicators of learning. Convergent and divergent tasks. Multiple intelligences and development of creativity.	
<b>Literature:</b> Bagdy Emőke: Személyiségfejlesztő módszerek az iskolában. Budapest : Nemzeti Tankönyvkiadó, 2002. 308 s. ISBN 9631922359 Bordás Sándor, Forró Zsuzsa, Németh Margit, Stredl Terézia: Pszichológiai jegyzetek. 3. vyd. Komárom : Valeur s.r.o., 2009. 320s. ISBN 9788089234851 Hvozdík Ján: Základy školskej psychológie. 1. vyd. Bratislava : Slovenské Pedagogické Nakladateľstvo, 1986. 360s. Zelina Miron: Aktivizácia a motivácia žiakov na vyučovaní. Krajský pedagogický ústav v Prešove, 1991. 73 s. ISBN 0006427 Zelina Miron: Stratégie a metódy rozvoja osobnosti : Metódy výchovy. 2. vyd. Bratislava : Iris, 1996. 234 s. ISBN 8096701347 STRÉDL, Terézia. Inkluzív pedagogia: avagy a gyógypedagógiáról másképp. 1.vyd. Komárno: Univerzita J. Selyeho, 2013. 148 s.[8 AH]. ISBN 978-80-8122-089-0. BORDÁS, Sándor, Melinda NAGY a Terézia STRÉDL. A pszichológia és társadalomtudományai [elektronický zdroj]. 1. vyd. Komárno: Univerzita J. Selyeho, 2015. CD-ROM, 288 s. ISBN 978-80-8122-164-4.	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian and Slovak Language	



**Notes:****Evaluation of subjects**

Total number of evaluated students: 567

A	B	C	D	E	FX
51.5	23.81	10.76	7.41	5.47	1.06

**Teacher:** Mgr. Anita Tóth-Bakos, PhD.**Date of last update:** 09.05.2019**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ POP/15	<b>Name:</b> Comparative Education
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Evolution: A – 90 -100%, B – 80 -89%, C – 70 -79%, D – 60 - 69%, E – 50 -59%.	
<b>Results of education:</b> Student has studied the educational program sin the European context, methodology of comaparative education analyzing the data of PISA and OECD monitoring.	
<b>Brief syllabus:</b> Specific disciplines of education. Comparative education – definition, mission. Educational alternatives, programs – basic concepts. International surveys and evaluation: PISA, OECD, national evaluation – monitor. Comparing school systems in Europe. Framework and opportunities of evaluations and assessment. Data and results of local, regional, national and international evaluations. Objectivity and subjectivity of assessment. Modification and impelentation of data.	
<b>Literature:</b> Albert Sándor: Az iskolai és óvodai oktatási programok kialakításáról. Komárno : Univerzita J.Selyeho, 2009. 121 s. ISBN 9788089234790 Kovátsné Németh Mária: Fenntarthatóság, pedagógia, kutatás. Győr : Nyugat-Magyarországi Egyetem Apáczai Csere János Kar, 2007. 227 s. ISBN 9789639364851 Kovátsné Németh Mária: Reformpedagógiai koncepciók, alternatív megoldások. Komárno : Selye János Egyetem, 2007. 330 s. ISBN 9788089234349 Pukánszky Béla: A gyermek évszázada. Budapest : Osiris, 2000. 166 s. ISBN 9633797705 Švecová Valéria: Základy pedagogiky. Technická univerzita v Košiciach, 1998. 124 s. ISBN 8070993235 Turek Ivan: Školstvo v štátoch OECD a EÚ. Bratislava : Metodické centrum, 2001. 120 s. ISBN 8080521077 Zelina Miron: Alternatívne školstvo : alternatívne školy, alternatívna pedagogika, alternatívne pedagogické koncepcie a smery. Bratislava : IRIS, 2000. 257 s. ISBN 8088778980 TÓTH, Péter, Enikő MAJOR, István SIMONICS, Jenő DUCHON a Anikó VARGA. Pedagógiai kutatások a Kárpát-medencében: 2. Kárpát-medencei Oktatási Konferencia. 1. vyd. Budapest: Óbudai Egyetem, 2017. 506 s. ISBN 978-963-449-026-5.	
<b>Language, knowledge of which is necessary to complete a course:</b>	

Hungarian and Slovak Language					
<b>Notes:</b>					
<b>Evaluation of subjects</b>					
Total number of evaluated students: 317					
A	B	C	D	E	FX
34.38	36.28	20.5	5.99	2.21	0.63
<b>Teacher:</b> prof. Dr. Péter Tóth, PhD.					
<b>Date of last update:</b> 09.05.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ PSO/15	<b>Name:</b> Psychology of Personality
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Final test. Condition for successful completion of this course is to obtain at least 50% of the maximum possible assessment of the subject. Evaluation: A - 90 -100%, B - 80% -89 C - -79% 70, D - 60-69%, E - 50 -59%.	
<b>Results of education:</b> Student will learn about the representants and trends within the personality psychology, such as typology, structure of personality and about the strong and weak sides of the personality affecting success in the school.	
<b>Brief syllabus:</b> Definition of the special psychological discipline, basic terms. Representants and their theories: Hippocrates, Pavlov, Jung, Eysenck, Rogers, Gordon. Structure of personality. Gardner: multifactor intelligence, Emotional intelligence and its development in the school. Psycho-pathology. Coping and healthy personality.	
<b>Literature:</b> Calvin S. Hall, Gardner Lindzey, John C. Loehlin, Martin Manosevitz: Psychológia osobnosti : Úvod do teórie osobnosti. 1. vyd. Bratislava : Slovenské pedagogické nakladateľstvo, 1997. 510 s. ISBN 8008009942 Jung C. G.: A személyiség fejlődése : C. G. Jung összegyűjtött munkái tizenhetedik kötet. 1. vyd. Budapest : Scolar Kiadó, 2008. 208 s. ISBN 9789632440026 Ranschburg Jenő: Az érzelem és a jellem lélektanából. Budapest : Okker Kiadó, 2003. 304. ISBN 9637315780. Ranschburg Jenő: Pszichológiai rendellenességek gyermekkorban. Budapest : Nemzeti Tankönyvkiadó, 1998. 200 s. ISBN 9631927008	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian and Slovak Language	
<b>Notes:</b>	
<b>Evaluation of subjects</b> Total number of evaluated students: 191	

A	B	C	D	E	FX
28.27	37.7	31.94	2.09	0.0	0.0
<b>Teacher:</b> PaedDr. Terézia Strédl, PhD.					
<b>Date of last update:</b> 09.05.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ PSV/15	<b>Name:</b> Personal and social education in lifelong learning
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week: 2 For the study period: 26</b> <b>Methods of study:</b> present	
<b>Number of credits:</b> 3	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> The class is finished by an exam. The exam has to be passed at the end of the term in written form, as a knowledge test. At least 50% of the test has to be successful to pass the class. A mark – 90 -100%, B mark – 80 -89%, C mark – 70 -79%, D mark – 60 - 69%, E mark – 50 -59%	
<b>Results of education:</b> Students will acquire the fundamentals of lifelong learning and also the personal and social competences to perform as an educational professional	
<b>Brief syllabus:</b> The positions of the subject in the system of educational sciences. The beginnings, development and tasks of personal and social education. Competences of a teacher. Guidelines for creative and practical solutions during and educational process. Practical solutions to the issues in connection to the family, school and non-educational facilities during the personal development of pupils. individual approach of teacher to the pupil	
<b>Literature:</b> Albert Alexander, Turek Ivan: O zblížovaní vzdelávania v Slovenskej republike v Európskej únii. Košice : Technická univerzita, 2000. - 152 s. - ISBN 80-7099-525-4. Nagy József: Kompetencia alapú kritériumorientált PEDAGÓGIA. Szeged : Mozaik Kiadó, 2007. 383 s. ISBN 978 963 697 5418 Nagy József: XXI. század és nevelés. Budapest : Osiris Kiadó, 2002. 350 s. ISBN 963 379 769 1 Pukánszky Béla, Zsolnai Anikó: Pedagógiák az ezredfordulón : Szöveggyűjtemény. Budapest : Eötvös József Könyvkiadó, 1998. 246 s. ISBN 963 9024 38 4 Zelina Miron: Stratégie a metódy rozvoja osobnosti : Metódy výchovy. Bratislava : Iris, 1996. 234 s. ISBN 8096701347	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian and Slovak Language	
<b>Notes:</b>	
<b>Evaluation of subjects</b> Total number of evaluated students: 216	

A	B	C	D	E	FX
44.91	23.15	21.76	6.02	4.17	0.0
<b>Teacher:</b> prof. Dr. Béla István Pukánszki, DSc.					
<b>Date of last update:</b> 09.05.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ RAS/15	<b>Name:</b> Family and School
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 2.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> One written test during a term for 60 points, another 60 points could be earned for continuous in-class activities (essay). At least 40 points – 50% of all possible points - has to be earned to pass the class. A mark - 90-100%; B mark 80-89%; C mark 70-79%; D mark 60-69%, E mark 50-59%	
<b>Results of education:</b> Passing this subject students will get wide knowledge and informations about family and school, as the basic institutions of education and their responsibilities during the personal development of children, also during education, socialisation, preventive educational and consulting activities. Students will be able to provide basic cooperation between the school and family, to integrate parents to the school-life and to communicate with them as with the partners of the school, also will understand the interactive relationship between family, school and other environment of children	
<b>Brief syllabus:</b> Family and school as basic educational institutions. Environment and education of people. Functions of the family. Educations within the family as a part of a historical development. Functions of the school. Cooperation between school and family. Family and their cooperation with school. Forms and levels of cooperation between family and school. Interpersonal teacher competences and relationships with the parents. Communications between school and family, cooperation possibilities	
<b>Literature:</b> Andorka Rudolf: Gyermek, család, történelem. Budapest: ARTT, 2001. 338. ISBN 9639211249 Gordon Thomas: A tanári hatékonyság fejlesztése. A T.E.T.-módszer. Budapest : Gondolat, 1991. 343 s. ISBN 963 282 600 0 Hernádi Miklós: Családbomlás az ezredfordulón. Budapest : Akadémiai, 2003. 172. ISBN 9630578190 Petró András: Szülőknek az iskoláról. Budapest : Nemzeti Tankönyvkiadó, 1997. 208. ISBN 9631882993 Rozinajová Helena: Pedagogika rodinného života pre učiteľov. Bratislava : Slovenské Pedagogické Nakladateľstvo, 1988. 267s.	



Spéder Zsolt: Család és népesség-itthon és Európában. Budapest : Sajtóház Kiadó, 2003. 562. ISBN 9639211613

Szretykó György: Globalizáció és család : A családszociológia új kihívásai. Pécs : Comenius Bt., 2002. - 160 s. ISBN 963 204 376 6

Trencsényi László: Hetedik nekifutás az értékek útvesztőjében. Budapesti Nevelő, 2009/2. [http://preview.fppti.hu/data/cms54391/2009\\_2.szam\\_teljes%29.pdf](http://preview.fppti.hu/data/cms54391/2009_2.szam_teljes%29.pdf)

Satirová, V.: Kniha o rodine, SVAN Praha, 2006

SZÉKELY, Levente a Ádám István NAGY. Online youth work and eYouth - A guide to the world of the digital natives. Children and Youth Services Review. Vol. 33, no. 11 (2011), p. 2186-2197. ISSN 0190-7409. WoS, SCOPUS. IF (2011): 1,269. SNIP (2013): 0,932.

NAGY, Ádám István. Comparative Analysis of the National Civil Fund and the National Cooperation Fund. Civil Szemle. Vol. 11, no. 3 (2014), p. 47-69. ISSN 1786-3341. WoS. IF (2013): 0,039.

NAGY, Ádám István a Tímea TIBORI. Narratívák hálójában: az ifjúság megismerési és értelmezési kísérletei a rendszerváltástól napjainkig. In: Negyedszázad Magyar Ifjúság 2012. Budapest: Iuvenis Ifjúságszakmai Műhely, 2016, P. 400-431. ISBN 978-963-89861-6-0.

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

Hungarian and Slovak Language

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 87

A	B	C	D	E	FX
22.99	16.09	20.69	14.94	25.29	0.0

**Teacher:** Gyöngyi Gál, PhD.

**Date of last update:** 09.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ SCV/15	<b>Name:</b> Sociology of education
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Lecture <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> The class is finished by an exam. The exam has to be passed at the end of the term in written form, as a knowledge test. At least 50% of the test has to be successful to pass the class. A mark – 90 -100%, B mark – 80 -89%, C mark – 70 -79%, D mark – 60 - 69%, E mark – 50 -59%	
<b>Results of education:</b> Student acquires determinants of educational sociology with effect pupil's school success.	
<b>Brief syllabus:</b> Socializing layers and elements. Family as primer socialization. School as secondary socialization. Freetime as tertiary socialization. Media as fourth-order socialization. Socializing elements: civil sector, church, political socialization and other. Characteristics and changes in youth's life. Youth and their problems in the millennium III. The institutionalized education. Educational styles and their forming effects. Social disadvantage and school success.	
<b>Literature:</b> Bagdy Emőke: A pedagógus hivatásszemélyisége : Egy pályaszocializációs kísérlet tanulságai. 1. vyd. Debrecen : KLTE Pszichológiai Intézet, 1996. 261 s. ISBN 963 472 220 2 Bagdy Emőke: Családi szocializáció és személyiségzavarok. Budapest : Nemzeti Tankönyvkiadó, 2002. 138 s. ISBN 963 19 2415 7 Balvín Jaroslav: Filozofie výchovy a metody výuky romského žáka.1. vyd. - Praha : RADIX s.r.o., 2008. 256 s. ISBN 9788086031835 Gábor Kálmán: Társadalmi átalakulás és ifjúság. Szeged : Belvedere Meridionale, 2000. 293. ISBN 9630395983 Kozma Tamás: Bevezetés a nevelésszociológiába. Budapest : Nemzeti Tankönyvkiadó, 2001. 489 s. ISBN 963 19 5512 5 Ondrejkovič Peter: Socializácia mládeže ako východisková kategória sociológie výchovy a sociológie mládeže : Príspevok k riešeniu problémov sociológie výchovy a mládeže. 1. vyd. Bratislava : VEDA, 1997. 204 s. ISBN 8022404764 Palkovičová Eva: Pohľady na občiansku kultúru. Bratislava : Kalligram, 2000. 127 s. ISBN 8071493597 Rapoš Ivan: Výchova k ľudským právam = Príručka pre učiteľov.1. vyd. Bratislava : PHARE Democracy Programme, 1994. 112 s. ISBN 8096716905	

TRENCSENYI, László a Ádám István NAGY. Tanórán innen, iskolán túl: a szociálpedagógiai gondolat létjogosultsága. In: Tizenkilencre lapot?: Szociálpedagógia a 21. században. Kecskemét: Pallasz Athéné Egyetem, 2017, P. 7-35. ISBN 978-615-5192-54-8.

NAGY, Ádám István. Ej, ráérünk arra még?: A szabadidőpedagógia elméleti alapjai. 1. vyd. Komárno: Univerzita J. Selyeho, 2015. 209 s. ISBN 978-80-8122-140-8.

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

Hungarian and Slovak Language

**Notes:**

**Evaluation of subjects**

Total number of evaluated students: 170

A	B	C	D	E	FX
24.12	25.88	17.06	14.12	18.82	0.0

**Teacher:** Gyöngyi Gál, PhD.

**Date of last update:** 09.05.2019

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ SOZ/15	<b>Name:</b> Social skills training
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Practical <b>Recommended extent of course ( in hours ):</b> <b>Per week: For the study period:</b> 20s <b>Methods of study:</b> present	
<b>Number of credits:</b> 1	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> Student attends at student experiential activities.	
<b>Results of education:</b> The goal is to motivate and develop self-knowledge and self-reflection students. The student will be able to: - recognize the importance of self-knowledge and personal development in teaching practice - define their strengths and weaknesses - of constructive self-criticism and criticism - to build a positive self-image in the context of the teaching profession. Student through experiential activities acquires experience of active social and experiential learning.	
<b>Brief syllabus:</b> Subject is done through experiential activities and exercises aimed mainly at: 1. The area outside world in the process of self-knowledge - individual membership in different social groups and how these acts on it, 2. internal area of the world in the process of self-knowledge - experiencing, thinking, decision making , the ways we influence our emotions and our physical component, how hidden beliefs influence our thinking and so on. 3. The area of the transition zone - behavior, communication, external physical characteristics. 4. Increasing sensitivity to equity if survival and survival emotions of others.	
<b>Literature:</b> Mareš Jiří. Sociální a pedagogická komunikace ve škole. - 1. vyd. - Praha : Statní Pedagogické Nakladatelství, 1989. - 165s. - ISBN 80-04-21854-7. Buda Béla. Empátia a beleélés lélektana. - Pécs : Lingua Franca Csoport, 1993. - 352. - ISBN 9630432102. Murayné Szy. Éva. Játékos beszédnevelés. - Budapest : Múzsák Közművelődési Kiadó, 1980. - 190 s. - ISBN 9635641915. Hennig Claudius. Antistresový program pro učitele : Projevy, příčiny a způsoby překonání stresu z povolání. - 1. vyd. : Portál, 1996. - 99 s. - ISBN 80-7178-093-6. STRÉDL, Terézia. Dramatoterapia a jej socializačné možnosti. 1. vyd. Komárno: Univerzita J. Selyeho, 2012. 111 s. [6 AH]. ISBN 978-80-8122-033-3. HORVÁTHOVÁ, Kinga a István SZÓKÖL. A pedagógiai kommunikáció. 1. vyd. Komárno: Univerzita J. Selyeho, 2016. 137 s. [7,87 AH]. ISBN 978-80-8122-175-0.	
<b>Language, knowledge of which is necessary to complete a course:</b>	

Hungarian and Slovak Language	
<b>Notes:</b> Block form of education.	
<b>Evaluation of subjects</b> Total number of evaluated students: 131	
a	n
100.0	0.0
<b>Teacher:</b> Dr. habil. PaedDr. Kinga Horváth, PhD., PaedDr. Terézia Strédl, PhD., Mgr. Anita Tóth-Bakos, PhD.	
<b>Date of last update:</b> 09.05.2019	
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.	

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University					
<b>Name of the faculty:</b> Faculty of Education					
<b>Code:</b> KPD/SZdm/TPO/15		<b>Name:</b> Theoretical knowledge of the field of study			
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> <b>Recommended extent of course ( in hours ):</b> <b>Per week: For the study period:</b> <b>Methods of study:</b> present					
<b>Number of credits:</b> 2					
<b>Recommended semester/trimester of study:</b>					
<b>Level of study:</b> II.					
<b>Prerequisites:</b> KPD/SZdm/PDI/15 and KPD/SZdm/PEP/15 and KPD/SZdm/SCV/15 and KPD/SZdm/VPU/15 and KPD/SZdm/HPP/15 and KPD/SZdm/KSA/15 and KPD/SZdm/PSV/15					
<b>Conditions for passing the subject:</b> Final Examination of the theoretical knowledge of their specialized study, which evaluated the selection board. Evolution: A – 90 -100%, B – 80 -89%, C – 70 -79%, D – 60 - 69%, E – 50 -59%.					
<b>Results of education:</b> Graduate of the Department of Post-Secondary Teaching subjects through common sociálnovedného, pedagogical and psychological basis of teaching disciplines master basic content of their specialization, the principles of its structure, is familiar with the methodology of content production department and its broader cultural and social contexts. With this contains evidence treated as a product of human (scientific) activities, and in this context it is able to design the didactic intents and purposes. In addition to managing the teaching competence (design, implementation and reflection of classroom instruction) it is able to participate in the development of methodological materials for teaching.					
<b>Brief syllabus:</b>					
<b>Literature:</b> The compulsory and elective subjects is given subject data sheets.					
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian and Slovak Language					
<b>Notes:</b>					
<b>Evaluation of subjects</b> Total number of evaluated students: 159					
A	B	C	D	E	FX
37.74	29.56	22.64	6.29	3.77	0.0
<b>Teacher:</b>					
<b>Date of last update:</b> 14.06.2019					

**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth,  
PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University					
<b>Name of the faculty:</b> Faculty of Education					
<b>Code:</b> KPD/SZdm/ TVZ/15		<b>Name:</b> Education technology			
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present					
<b>Number of credits:</b> 1					
<b>Recommended semester/trimester of study:</b> 3.					
<b>Level of study:</b> II.					
<b>Prerequisites:</b>					
<b>Conditions for passing the subject:</b> Awritten test duringthesemester (50 points), and task-releases (50 points). Evaluation: A - 90 to 100%, B - 80% -89 C - -79% 70, D - 60-69%, E - 50 -59%.					
<b>Results of education:</b> Knowing about the philosophy of informationsociety andcomparison of thetraditional school.					
<b>Brief syllabus:</b> Introduction - Description of thetraditional schooleducation and informationsocietyeducation. Characteristics of theinformationsociety. Glossary: communication, digitization, computerization, globalization, digitalcapabilities, hazards of, propertyrights, thetheory of cognitiveprocessinthedigitalworld, teachingstyles, thepossibilities of ICT, teaching and learningforms and methods of thedigitalworld. E-books, e-learning, m-learning, teaching software. Knowledge Test. thefundamental of Computers. Multimediacomputers, interactivecommunicationineducation - chat, blogging, video conferencing,					
<b>Literature:</b>					
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian and Slovak Language					
<b>Notes:</b>					
<b>Evaluation of subjects</b> Total number of evaluated students: 75					
A	B	C	D	E	FX
30.67	21.33	10.67	16.0	21.33	0.0
<b>Teacher:</b> prof. Dr. Péter Tóth, PhD., prof. Dr. Krisztián Józsa, PhD.					
<b>Date of last update:</b> 09.05.2019					
<b>Approved by:</b> GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					



## INFORMATION SHEET

<b>Name of the university:</b> J. Selye University	
<b>Name of the faculty:</b> Faculty of Education	
<b>Code:</b> KPD/SZdm/ VPU/15	<b>Name:</b> Developmental learning disorders
<b>Types, range and methods of educational activities:</b> <b>Form of study:</b> Seminar <b>Recommended extent of course ( in hours ):</b> <b>Per week:</b> 1 <b>For the study period:</b> 13 <b>Methods of study:</b> present	
<b>Number of credits:</b> 2	
<b>Recommended semester/trimester of study:</b> 3.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Conditions for passing the subject:</b> One written test during a term for 50 points, another 50 points could be earned for continuous in-class activities (presentation of casuistics). At least 50 points – 50% of all possible points - has to be earned to pass the class. A mark - 90-100%; B mark 80-89%; C mark 70-79%; D mark 60-69%, E mark 50-59%.	
<b>Results of education:</b> Students will be able to specify various types of educational disorders, to classify them, provide basic corrections, cooperate with supportive professionals and to teach by individual educational plans for pupils with special needs.	
<b>Brief syllabus:</b> 1. Developmental disorders and forms of occurrence 2. Characteristics of performance decrease 3. Dyslexia, dysgrafia, dysorthografia 4. Dyskalkulia, dyspraxia 5. ADD, ADHD 6. Conners' Hyperactivity Scale – screening 7. Methodical guidelines for integration 8. Individual educational plans elaboration 9. Classification and assesment of pupils with special needs 10. Correction and re-education 11. Tasks of a special teacher, school psychologist, educational assistent 12. Cooperation with special centres: CPPPaP, CŠPP	
<b>Literature:</b> . Földi Rita: Hiperaktivitás és tanulási zavarok. 1. vyd. Pécs : Comenius Bt., 2004. 155 s. ISBN 963 86432 7 7 Porkolábné Balogh Katalin: Készségfejlesztő eljárások tanulási zavarral küzdő kisiskolásoknak. 3. vyd. Budapest : ELTE, 2005. 45s. Strédl Terézia: Inkluzív pedagógia avagy a gyógypedagógiáról másképp. 1. vyd. Komárno : Univerzita J. Selyeho, 2013. 148 s. ISBN 9788081220890 Vašek Štefan: Špeciálno pedagogická diagnostika. 4. vyd. : Sapientia s.r.o, 2004. 168 s. ISBN 8096911201 Zelinková Oľga: Poruchy učení : dyslexie, dysgrafie, dysortografie, dyskalkulie, dyspraxie, ADHD. 1. vyd. Praha : Portál, 2009. 263 s. ISBN 9788073675141 www.statpedu.sk	
<b>Language, knowledge of which is necessary to complete a course:</b> Hungarian and Slovak Language	

**Notes:****Evaluation of subjects**

Total number of evaluated students: 172

A	B	C	D	E	FX
53.49	34.88	11.05	0.58	0.0	0.0

**Teacher:** PaedDr. Terézia Strédl, PhD.**Date of last update:** 09.05.2019**Approved by:** GuaranteeDr. habil. PaedDr. Melinda Nagy, PhD.Guaranteeprof. Dr. Péter Tóth, PhD.Guaranteedoc. RNDr. Róbert Gyepes, PhD.