INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ CDS/15	**Name:** Chemical and Didactical Software
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: Upon successful completion of the course the students will acquire skill in selected software and aptitude to integrate them into the education process.	
Brief syllabus: 1. Basis of the cheminformatics. 2. Simulation of the physical properties of the molecule. Overview of the quantum-chemistry sotfware. (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 mikroskóp 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.	
Literature: 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: 7

A	B	C	D	E	FX
71.43	14.29	14.29	0.0	0.0	0.0

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

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ DC1/15	**Name:** Didactics of Chemistry I.
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: Upon successful completion of the course, the students will acquire theoretical knowledge about general didactics point the chemistry education.	
Brief syllabus: 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 generaly. 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.	
Literature: ALBERT,S. Didaktika. Dunajská Streda: LiliumAurum, 2005. 250s. ISBN 8080622523 DILLINGER, M. Kapitoly z didaktiky chémie. - 1. vyd. Bratislava : Slovenské pedagogické nakladateľstvo, 1977. 336 s. FALUS,I. Didaktika. - Budapest : Nemzeti Tankönyvkiadó, 2003. - 552. - ISBN 9631952967 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
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-gymnaziaISCED-3a/Clovek-a-priroda.alej
http://www.statpedu.sk/files/documents/cp-2013-2014/cp_chemia_2013_2014.pdf

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

Notes:

Evaluation of subjects

Total number of evaluated students: 7

A	B	C	D	E	FX
14.29	28.57	42.86	14.29	0.0	0.0

Teacher: Mgr. Katarína Szarka, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ DC2/15	**Name:** Didactics of Chemistry II.
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: 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	
Brief syllabus: 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 : KözoktatásügyiKiadóvállalat, 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.
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-gymnaziaISCED-3a/Clovek-a-priroda.alej
http://www.statpedu.sk/files/documents/cp-2013-2014/cp_chemia_2013_2014.pdf

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

Notes:

Evaluation of subjects

Total number of evaluated students: 7

A	B	C	D	E	FX
0.0	28.57	42.86	28.57	0.0	0.0

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

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ DC3/15	**Name:** Didactics of Chemistry III.
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 3.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: 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	
Brief syllabus: 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. Didakctic 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.
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-gymnaziaISCED-3a/Clovek-a-priroda.alej
http://www.statpedu.sk/files/documents/cp-2013-2014/cp_chemia_2013_2014.pdf

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

Notes:

Evaluation of subjects

Total number of evaluated students: 4

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

Teacher: Mgr. Andrea Vargová, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ DEK/15	**Name:** Assessment for Learning and Assessment of Learning in Chemistry Education

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

Number of credits: 1

Recommended semester/trimester of study: 3.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
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%.

Results of education:
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 able to implement theoretical knowledge into chemistry teaching process during his/her pedagical practice.

Brief syllabus:
1. Introduction. Basic concepts of the assessment process. Assessment forms and methods. Classification process.
2. The approaches in assessment process. Assessment of Learning(AofL), Assessment for Learning (AfL) and Assessment as Learning (AasL).
3. Characterization of the Assessment of Learning Process.
4. Characterization of the Assessment for Learning Process. Assessment for Learning and authentic assessment tools in chemistry education.
5. Making the Assessment for Learning and authentic assessment tools in chemistry education.
6. Worksheet with exercises, test questions, problem formulations and their role in chemistry education.
7. Making worksheet and writing test for chemistry education.
8. Problem-based tasks in chemistry education.
9. Selected methods of diagnostical assessment.
10. Portfolio a e-portfolio in chemistry education.
11. Presentation and defence of students homework. The final evaluation of the course.

Literature:
AMONASVILI, S.A. Aziskolai 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

BURJAN,V. Tvorba a využívanie školských testov.EXAM – Info č.1-7. On-line: http://www.burjanoskole.sk/wp-content/uploads/documents/Tvorba_testov_komplet.pdf
LAVICKÝ, T. Tvorba a využívanie školských testov-učebný text pre PVPZ a PV. Prešov: MPC on-line: http://www.mcpo.sk/downloads/Publikacie/PrirodPred/PPCHE200501.pdf
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 : AkadémiaiKiadó, 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: 4

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

Teacher: Mgr. Katarína Szarka, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ DP1/15	**Name:** Technical and Didactical Aspects of Chemistry Laboratory Practical Education I.
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: 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.	
Brief syllabus: 1. Introduction. Didactical interpretation of occupational safety and health regulation during the chemical laboratory practice 2. Characterization of school chemical experiments- their types and division. Characterization of student’s competencies 3. Characterization and maintenance of school laboratory equipments , laboratory glassware, aids and chemicals. Terminology of laborotory equipments and technics, and their didactic interpretation in chemistry teaching. 4. Range and systematization of basic equipments, chemicals in equipment store- administration and updating of chemical inventory . 5. Development and consolidation of manual skills and habits during the work with chemicals. Didactic interpretation of basic laboratory operations . 6. Didactic interpretation of demonstration experiments. Demonstration experimets carried out with screening, modeling of chemical experiments using IKT/DT. 7. Didactic interpretation of student's experiments. Adaptation of project methody and IBST methody. (Inquiry Based Science Teaching). 8. Experimets realized in the field. „Portable laboratory"and their didactic interpretation. 9. Implementation of laboratory measuring instruments and computer aided laboratory techniques in the chemistry teaching. The basic principals in good laboratory practice. 10. Assessment of student's work in chemical laboratory	

11. 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 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 978-80-8091-181-2RÓZSAHEGYI, M. – WAJAND, J. 575 kísérlet a kémia tanításához. 3. vyd. Budapest : Nemzeti TankönyvkiadóRt., 1998. 646 s. ISBN 963 18 8512 7
RÓZSAHEGYI, M. – WAJAND, J. Kémia itt, kémia ott, kémia mindenhol! Budapest : NemzetiTankönyvkiadó, 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: 7

A	B	C	D	E	FX
71.43	14.29	0.0	14.29	0.0	0.0

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

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ DP2/15	**Name:** Technical and Didactical Aspects of Chemistry Laboratory Practical Education II.

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

Number of credits: 3

Recommended semester/trimester of study: 3.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
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%.

Results of education:
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 succesful completion of the course the student is able to carry out chemical experiments from everyday life.

Brief syllabus:
1. Introduction. Basic principals of good laboratory practice. Occupational safety.
2. Didactic interpretation of school experiments connected with themes chemistry around us (ISCED 2) and system of materials. (ISCED 3A)
3. Didactic interpretation of experiments from theme: Transformation of materials-physical and chemical changes. (ISCED 2 and ISCED 3).
4. Didactic interpretation of experiments from topic: Factors affecting the reaction rate. (ISCED 2 and ISCED 3).
5. Didactic interpretation of experiments : Protolytic reactions (ISCED 2 and ISCED 3).
6. Didactic interpretation of experiments: redox reactions (ISCED 2 and ISCED 3).
7. Didactic interpretation of experiments from selected topics of inorganic chemistry (ISCED 2 and ISCED 3).
8. Didactic interpretation of experiments from selected topics of organic chemistry (ISCED 2 and ISCED 3).
9. Didactic interpretation of experiments from selected topics of biochemistry. (ISCED 2 and ISCED 3).
10. Didactic interpretation of experiments from selected topics of analytical chemistry (ISCED 2 a ISCED 3).
11. Chemical experiments from everyday life and their application in teaching of chemistry.

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 978-80-8091-181-2RÓZSAHEGYI, 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: 4

A	B	C	D	E	FX
75.0	0.0	25.0	0.0	0.0	0.0

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

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ DTK/15	**Name:** ICT in Chemistry Education
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: Upon successful completion of the course, the students will meet the properties and attributes of the information society. They will 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 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.	
Brief syllabus: 1. Introduction. Comparation attributies 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, gigitalization, 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 competemcies, e-learning materials, e-Learning, m-Learning, learning software – charakterization. 6. The 1st writting test. 7. Basic tools of ICT. 8. History of ICT. 9. Mobil 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.

Literature:

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

Notes:

Evaluation of subjects
Total number of evaluated students: 7

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

Teacher: Mgr. Katarína Szarka, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ FDK/15	**Name:** Methods of Development of Chemistry Education Didactics

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

Number of credits: 1

Recommended semester/trimester of study: 1.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
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%.

Results of education:
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 educationin primary and secondary school. The students will able to do with talented students in chemistry and with student whom weak point is the chemistry as a school subject.

Brief syllabus:
1. Introduction. Student's personality. Differentiation, individualiyation and personaliyation of the learning process in chemistry.
2. How to approach talented students? How to support talented students' development?
3. Theoretical classroom problem-based learning in chemistry.
4. Practical laboratory or outside problem-based learning in chemistry.
5. The mission and managing of subject oriented competitions in science education in primary and secondary school.
6. Worksheet example of chemistry olympiad.
7. Worksheet example of correspondence competitions.
8. Making chemistry worksheet to support the talented students' development.
9. Preparation the students for leaving chemistry exam.
10. How to approach the weak students and support their development in chemistry?
11. Teaching and lesson plan to support students development in chemistry.
12. The final evaluation of the course.

Literature:
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 : Novotrade Kiadó, 1990. 192 s. ISBN 963 586 093 X
VILLÁNYI, A. Ötösöm lesz kémiából : Megoldások. 1. vyd.Budapest : Novotrade Kiadó, 1990. 422 s. ISBN 963 585 093 X
http://www.iuventa.sk/sk/Olympiady/Olympiady-a-sutaze/CHO.alej
http://chem.korsem.sk/
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: 7

A	B	C	D	E	FX
42.86	0.0	42.86	0.0	14.29	0.0

Teacher: Mgr. Katarína Szarka, PhD., Mgr. Andrea Vargová, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ IAK/15	**Name:** Foreign Chemical Extraction of Food-stuffs
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 3.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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).	
Results of education: 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 importace 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.	
Brief syllabus: 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 healty 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. Normacontrols, 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: 4

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

Teacher: doc. Ing. Ondrej Hegedűs, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ JCH/15	**Name:** Nuclear Chemistry
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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).	
Results of education: By successfully finishing this course, students will be familiar with the basis of nuclear and radiochemistry, including the usage and handling of radioactive materials	
Brief syllabus: 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	
Literature: 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: 7

A	B	C	D	E	FX
0.0	42.86	42.86	14.29	0.0	0.0

Teacher: Dr. habil. Imre Varga, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ KCH/15	**Name:** Coordination Chemistry
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: Upon successful completion of the course, the students will acquire knowledge about the structure bonding properties, isomers and classification of coordination complexes.	
Brief syllabus: 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 nephelauxeticcal row of Ligands. 9. σ- a π-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 σ- a π-complexes.	
Literature: GREENWOOD, N. N., EARNSHAW, A.: Chemie prvků 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 (http://anorganika.fns.uniba.sk/~plesch/Systemanorgchem.pdf)	
Language, knowledge of which is necessary to complete a course:	

Notes:

Evaluation of subjects
Total number of evaluated students: 7

A	B	C	D	E	FX
85.71	14.29	0.0	0.0	0.0	0.0

Teacher: doc. RNDr. Róbert Gyepes, PhD., Gábor Dibó, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ KIK/15	**Name:** Chemical Literature and Sources for The Educational Practice for Teacher
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 3.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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).	
Results of education: By successfully finishing this course, students will have a boad 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, pedogogical 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.	
Brief syllabus: 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 presentions (oral and posters) 10. Citations, how to use citation protocols in the practice of the next chemistry teachers 11. Defense of the final project	
Literature: ZEĽOVÁ, 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)

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

Notes:

Evaluation of subjects
Total number of evaluated students: 4

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

Teacher: prof. Róbert Mészáros, DSc.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ KSM/15	**Name:** Methodology of Calculuses in Chemistry Education
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: 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.	
Brief syllabus: 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, Ľ. Príklady 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: Novotrade Kiadó, 1990. 192 s. ISBN 963 586 093 X

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

Notes:

Evaluation of subjects

Total number of evaluated students: 4

A	B	C	D	E	FX
0.0	0.0	25.0	75.0	0.0	0.0

Teacher: doc. Ing. Ondrej Hegedűs, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ MAM/15	**Name:** Motivational and Active Learning Methods in Chemistry Education
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: 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.	
Brief syllabus: 1. Introduction. The philosophy of LLL. Motivation to LLL. Motive and motivation – its types and their description. The motives to learn chemistry. 2. Contructivism. Classroom lesson by contructivist way – the role of teacher and student. Communication as a motivational, activizational and managment tool of teacher . 3. Characterization the active learning methods in chemistry. 4. Simple active learning methods in classroom chemistry lesson. 5. Aplication of the simple active learning methods in classroom chemistry lesson. 6. Cooperative learning. 7. Aplication 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 managment – 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.	
Literature: 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: 7

A	B	C	D	E	FX
42.86	42.86	14.29	0.0	0.0	0.0

Teacher: Mgr. Katarína Szarka, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ OPC/15	**Name:** Organoelement Chemistry
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 3.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: During the semester 2 writing tests are compulsory: the maximum points are 2 x 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).	
Results of education: After finishing his/her studies, the students became familiar with the atomic structure, bonding theories, and basis ofmetalorganic chemistry. We will focusing on the practical application of metalorganic compounds, especially their applications in the catalytic processes	
Brief syllabus: 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	
Literature: GREENWOOD, N. N., EARNSHAW, A.: Chemie prvků 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 (http://anorganika.fns.uniba.sk/~plesch/Systemanorgchem.pdf)	
Language, knowledge of which is necessary to complete a course:	

Notes:

Evaluation of subjects
Total number of evaluated students: 4

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: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ PPX2/15	**Name:** Pedagogycal Practice II.
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week: For the study period:** 20s **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: Active participation in the teaching practice will be carried out complying with the principles outlined by the UJS PF regulations of teaching practice..	
Results of education: 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.	
Brief syllabus: 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.	
Literature: Cooper, R. – Lavery, M. – Rinvolucri, 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. Riddel, D.: Teach Yourself – TEFL. London: Hodder Education, 2001. 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.	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects
Total number of evaluated students: 2

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

Teacher: prof. Dr. Béla István Pukánszki, DSc., Mgr. Katarína Szarka, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ PPX3/15	**Name:** Pedagogycal Practice III.
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week: For the study period:** 20s **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 3.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: Active participation in the teaching practice will be carried out complying with the principles outlined by the UJS PF regulations of teaching practice	
Results of education: 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.	
Brief syllabus: 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.	
Literature: • Cooper, R. – Lavery, M. – Rinvolucri, 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. • Riddel, D.: Teach Yourself – TEFL. London: Hodder Education, 2001. • 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.	
Language, knowledge of which is necessary to complete a course:	
Notes:	
Evaluation of subjects	

Total number of evaluated students: 3

A	B	C	D	E	FX
0.0	33.33	66.67	0.0	0.0	0.0

Teacher: prof. Dr. Béla István Pukánszki, DSc., Mgr. Katarína Szarka, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KCH/CHdm/ PPX4/15	**Name:** Pedagogycal Practice IV.

Types, range and methods of educational activities:
Form of study: Practical
Recommended extent of course (in hours):
Per week: For the study period: 40s
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 4.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
Active participation in the teaching practice will be carried out complying with the principles outlined by the UJS PF regulations of teaching practice

Results of education:
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.

Brief syllabus:
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

Literature:

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

Notes:

Evaluation of subjects
Total number of evaluated students: 4

A	B	C	D	E	FX
75.0	25.0	0.0	0.0	0.0	0.0

Teacher: prof. Dr. Béla István Pukánszki, DSc., Mgr. Katarína Szarka, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ SAM/15	**Name:** Spectral Methods
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: 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	
Brief syllabus: 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.	
Literature: SZABÓ, A.: Analitikai módszerek a klinikai kémiában, Budapest, Akadémiai Kiadó, ISBN 963 05 3395 2	

BRDIČKA, R.,DVOŘÁK, J.: Základy fysikální 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: 7

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

Teacher: doc. RNDr. Róbert Gyepes, PhD., doc. Ing. Ondrej Hegedűs, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KCH/CHdm/ SSM/15	**Name:** Chemistry Teaching Theory and Practice

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

Number of credits: 2

Recommended semester/trimester of study: 3., 4..

Level of study: II.

Prerequisites: 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

Conditions for passing the subject:
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%.

Results of education:
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.

Brief syllabus:
Selected chapters from Chemistry Disciplines.
General and Special methodology of teaching chemistry.

Literature:
The suggested literatures available within information paper of the obligatory subjects.

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

Notes:

Evaluation of subjects
Total number of evaluated students: 4

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

Teacher:

Date of last update: 14.06.2016
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ TCV/15	**Name:** Chemical Structures and Theory of Chemical Bond

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

Number of credits: 3

Recommended semester/trimester of study: 1.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
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%.

Results of education:
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

Brief syllabus:
1. Axioms of Quantum Theory.
2. Quantum numbers. The Pauli Exclusion Principle.
3. Time-independent and time-dependent Schrödinger equation.
4. The Born-Oppenheimer approximation. The Variational Principle.
5. Valence-Bond Theory.
6. MO LCAO. SCF.
7. Delocalized and localized Orbitals. Bonding, non-bonding and antibonding Molecular Orbitals. Hypo- and hypervalent molecules. Multicentre bonds. Classification of MO's — σ-, π- a δ-MO.
8. Methods of DFT.
9. Hypersurface of Potential Energy and its Role in Chemistry. Transition States. Excited States of Molecules.
10. Multiconfigurational Methods in Theoretical Chemistry.
11. Relativistic Effects in their Importance in Chemistry.
12. Symmetry in Chemistry. Symmetry Elements and Operations. Axioms of Group Theory. Reducibile and Irreducibile Representations.
13. Point Groups. Space Groups. Group Notations — Schönflies and Hermann-Mauguin.
14. Direct Product of Representations. Selection Rules in Spectroscopy.

Literature:

ČÁRSKY P., PANCÍŘ J., ZAHRADNÍK R.: Molekulové orbitaly 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.
KYSEĽ O.: Elektrónová štruktúra 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: 7

A	B	C	D	E	FX
14.29	14.29	28.57	0.0	42.86	0.0

Teacher: doc. RNDr. Róbert Gyepes, PhD., Dr. habil. PaedDr. György Juhász, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ TKT/15	**Name:** Planning and Realization of Chemical School Projects and Excursions
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week: For the study period:** 20s **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: 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, developes 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 , develope the ability to cooperate in group , divide tasks and take responsibility.	
Brief syllabus: 1. Basics of project management. 2. Phase of project –incubation phase and project planning . 3. Phase of project – execution and presentation of project 4. Phase of project– evaluation and correction of project 5. Excursion as an option of meaningful learning of chemistry. 6. Excursion as a tool of practical education. 7. Preparation for the excursion and explore possibilities and conditions of educational influences.Preparation of thematical excursion. 8. Organizational and technical aspects of chemical themed excursions 9. Planning process of chemical excursions. Making time-theme schedule. 10. Realization process of chemical excursion. 11. Evaluation of participation in thematical excursions. 12. Proceeds of excursion for the future teachers of chemistry 13. Advantages and disadvantages of domestic and foreign excursions.	
Literature:	

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: 4

A	B	C	D	E	FX
75.0	0.0	25.0	0.0	0.0	0.0

Teacher:

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ VFE/15	**Name:** Selected Chapters from Environmental Chemistry
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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).	
Results of education: 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 coonections 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 sustainabiity, as the positive perspectives of our society. He/she can apply this knowledge in chemical education in the form of pedagogical practice.	
Brief syllabus: 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 cemical 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.: Hulladékgazdálkodási 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: 7

A	B	C	D	E	FX
85.71	14.29	0.0	0.0	0.0	0.0

Teacher: Gábor Dibó, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/CHdm/ VFK/15	**Name:** Selected Chapters from Chemistry
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 3.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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).	
Results of education: 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.	
Brief syllabus: 1. The basics of macromolecular chemistry 2. The nomenclature of polymers 3. The tacticity of polymers 4. Basic reactions of the macrocyclic compounds 5. Characterization of the polymers, molecular weight distribution 6. Utilization of the polymers 7. Inorganic polymers 8. Basics of bioinorganic chemistry 9. Enzymology. Biocatalysis 10. Biogenic elements. The role of special metals in living systems 11. Toxicity of the heavy metals, the mechanism of their action 12. The cisplatin and its application as a drug. The complexes of gold 13. Contrast materials for MRI	
Literature: 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: 4

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

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

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/GEN 2/13	**Name:** Gender study 2
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%	
Results of education: Deepen students' knowledge in the field of education genera in historical context. The subject is based on a continuation of themes GEN1	
Brief syllabus: The social image of women and men at 20 and 21 pages. Main events in the creation of the image of women and the education of women at 20 and 21 pages. The development of educational equality, diversity, specifications, limitations. The struggle for women's participation in higher education in the 19th and 20th str. The role of women in I. and II. World War. The consequences of taking women to the labor market. Development of image "modern woman". Analysis of the life path of men and women, career women in 20th-century. Female intellectual profession. Change the lives of women after World War II. World War. "Baby room" and the consequences tgradicionálneho change the image of man and woman. Changes in education žienv second half of the century. Women at university - possibilities and limitations. Women in scientific life.	
Literature: Pukánszky Béla: A nőnevelés története. Jegyzet. Selye János Egyetem, Tanárképző Kar, Komárom, 2015. BÚTOROVÁ, Zora. a kol. (2003): Ženy, muži a rovnosť príležitostí. In: Slovensko 2002. Súhrnná správa o stave spoločnosti. Bratislava: Inštitút pre verejné otázky Kéri Katalin: Tollam szivárványba mártom. Források az európai nőtörténet köréből az ókortól a 20. századig. 1999. Pécs. Kéri Katalin: Nőkép és leánynevelés az 1960-as években – a tantervek tükrében. ActaPaedagogiva, 2002. 4. szám, 14-21. URl: www. kerikata.hu	

Palasik Mária és Sipos Balázs: Házastárs? Munkatárs? Vetélytárs? A női szerepek változása a 20. századi Magyarországon. 2005. Napvilág Kiadó, Budapest.

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

Notes:

Evaluation of subjects
Total number of evaluated students: 124

A	B	C	D	E	FX
50.0	13.71	25.0	8.87	2.42	0.0

Teacher: prof. Dr. Béla István Pukánszki, DSc.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KCH/KCH/ CHdm/PDO/15	**Name:** Thesis and Its' Defens
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 4	
Recommended semester/trimester of study: 3., 4..	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: Complete elaboration of the thesis. Positive review from the supervisor and the opponent. Successful defens of the thesis.	
Results of education: 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.	
Brief syllabus: 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.	
Literature: 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 ALBERT, S. (2007) : Dolgozatok írása. Komárno SJE, ISBN 978-80-89234-22-6 Odborná literatúra – podľa schválenej témy bakalárskej práce.	

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

Notes:

Evaluation of subjects
Total number of evaluated students: 1

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

Teacher:

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/ MEP2/15	**Name:** Mediálna pedagogika

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

Number of credits: 1

Recommended semester/trimester of study: 1.

Level of study: I., II.

Prerequisites:

Conditions for passing the subject:
- Written and practical exams

Results of education:
• Skill level to use multimedia methods for the environment
• Development of Critical Thinking.
• The student uses and develops critical thinking and information literacy skills.

Brief syllabus:
1. Basics of Media Education - repeat
2nd-3rd Information literacy - Information Society
4. The crowd and the media - communication and manipulation
5th-6th Understanding analysis: moving images, text, background, image material
7th-8th Analysis of a floating text or multimedia background
9th-10th Critical Thinking
11-12. real Mao
13. Summary

Literature:
The presentation material.

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

Notes:
The development of knowledge to solve problems multimedia environment
Sensitivity to problems
resources
Projector, computer, Internet connection, pointers

Evaluation of subjects
Total number of evaluated students: 34

A	B	C	D	E	FX
0.0	5.88	47.06	8.82	38.24	0.0

Teacher: Dr. habil. Ádám István Nagy, PhD.
Date of last update: 14.06.2016
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/ MLR/12	**Name:** Maďarská ľudová rozprávka
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: During the semester a written test (50%). The course ends with test (50%). The condition for the successful max. score min. 50%. The evaluation stages: A - 90 to 100%, B - 80% -89 C - -79% 70, D - 60-69%, E - 50 -59%.	
Results of education: The course successful students gain knowledge of Hungarian folk tale characteristics of its location in a European context, as well as sorting, grouping, etc. opportunities.	
Brief syllabus: Basic Concepts: tales and legends, variant and invariant affinity. History Research. The tales characterization. Classification experiments. National and international folk tale catalogs. Types Tale (Fairy tales, short stories tales, animal tales, etc.).	
Literature: Grimm, Jacob és Wilhelm: Családi mesék. Pozsony: Kalligram 2009 Grimm, Jacob és Wilhelm: Német mondák. Pozsony: Kalligram 2009 Komorovský, Ján: Kráľ Matej Korvín v ľudovej prozaickej slovesnosti. Bratislava 1957. Liszka József: Bevezetés a folklorisztikába. Dunaszerdahely 2010 Liszka József: Átmenetek folklór és nem-folkór határán. Komárom 2013 Lüthi, Max: Volksmärchen und Volkssage. Zwei Grundformen erzählender Dichtung. Bern–München: Francke Verlag 1975 Melicherčík, Andrej: Slovenský folklór. Chrestomatia. Bratislava 1959 Michálek Ján: Čarovné zrkadlo. Výber zo slovenskej ľudovej slovesnosti. Bratislava 1973 [azóta több kiadásban is!] Ortutay Gyula: Variáns, invariáns, affinitás. A szájhagyományozó műveltség törvényszerűségei. In uő.: A nép művészete. Budapest: Gondolat 1981, 9–53. p. Propp, Vlagyimir: A varázsmese történeti gyökerei. Budapest: L'Harmattan 2005 Vércse Miklós ford. és összeállította: Szlovák népmesék. Dunaszerdahely: Lilium Aurum 2008 Voigt Vilmos: Meseszó. Tanulmányok mesékről és mesekutatásról. Budapest: MTA–ELTE 2007–2009	
Language, knowledge of which is necessary to complete a course: Hungarian, Slovak or Germany Language	

Notes:

Evaluation of subjects
Total number of evaluated students: 24

A	B	C	D	E	FX
45.83	20.83	0.0	0.0	12.5	20.83

Teacher: Dr. habil. PhDr. József Liszka, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/ MVOL/16	**Name:** Methodology of Literature Search
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 2., 4.	
Level of study: I., II.	
Prerequisites:	
Conditions for passing the subject: During the semester each undergraduate have to draw up a term paper complying with the requirements (which values 30 points) and to successfully accomplish the written examination (which values 70 points). For grade A at least 90 points, for B at least 80 points, for C at least 70 points, for D at least 60 points and for E at least 50 points need to be achived.	
Results of education: The goal of the subject is to introduce the undergraduates to the basic electronic information sources and the methods of the information collecting. After fulfilling the subject the undergraduates will be capable to prepare qualitative seminar works, final essays and other scientific papers.	
Brief syllabus: 1. The library and its functions 2. Document types 3. Library catalogues and their function 4. The University Library of J. Selye University 5. Search techniques in the electronic catalogues 6. The types of bibliographies 7. E-libraries, archives 8. Literature databases 9. Web of Science, SCOPUS 10. E-sources 11. EBSCO and other available licence-based e-sources 12. Creation of bibliographic references and reference registers 13. How to prepare term papers, final essays and other scientific works	
Literature: 1. BABBIE, E. A társadalomtudományi kutatás gyakorlata. Budapest : Balassi, 2000. 2. ECO, U. Hogyan írjunk szakdolgozatot? Budapest : Gondolat, 1991. 3. FALUS, I. Bevezetés a pedagógiai kutatás módszereibe. Budapest : Műszaki Kvk., 2004. 4. KATUŠČÁK, Dušan. 1998. Ako písať vysokoškolské a kvalifikačné práce. Druhé doplnené vydanie. Bratislava : Stimul, 1998. ISBN 80-85697-82-3	

5. KATUŠČÁK, Dušan. 2005. Citovanie a zoznam bibliografických odkazov v práci. In: MEŠKO, Dušan – KATUŠČÁK, Dušan et al.: Akademická príručka. Druhé doplnené vydanie. Martin : Osveta, 2005, s. 215-238. ISBN 80-8063-200-6
6. KIMLIČKA, Štefan. 2004. Príklady citovania podľa ISO 690 a ISO 690-2 [online]. Bratislava : Katedra knižničnej a informačnej vedy FiFUK, 2004 [cit. 24. novembra 2015]. Dostupné na: < http://vili.uniba.sk/AK/citovanie_priklady.pdf>
7. Smernica rektora č. 7/2011 o úprave, registrácii, sprístupnení a archivácii záverečných prác na Univerzite J. Selyeho v Komárne. 19 s.
8. STN 01 6910: 1999. Pravidlá písania a úpravy písomností. Bratislava : Slovenský ústav technickej normalizácie.
9. STN ISO 690: 1998. Dokumentácia. Bibliografické odkazy. Obsah, forma a štruktúra. Bratislava : Slovenský ústav technickej normalizácie – Vydavateľstvo.
10. STN ISO 690-2. 2001. Informácie a dokumentácia. Bibliografické citácie. Časť 2: Elektronické dokumenty alebo ich časti. Bratislava : Slovenský ústav technickej normalizácie.
11. SZABÓ, K. Kommunikáció felsőfokon. Budapest : Kossuth, 2001.
12. TUREK, Ivan. 1999. Ako písať záverečnú prácu. 3. vydanie. Prešov : Metodické centrum Prešov, 1999. ISBN 80-8045-161-3
13. E-zdroje CVTI (http://ezproxy.cvtisr.sk/)

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

Notes:

Evaluation of subjects
Total number of evaluated students: 52

A	B	C	D	E	FX
11.54	7.69	13.46	15.38	25.0	26.92

Teacher:

Date of last update: 30.01.2017

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KMI/Mdm//MEP/15	**Name:** Metrické priestory

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

Number of credits: 3

Recommended semester/trimester of study: 3.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
The exam consists of a written part worth 80 points and an oral part worth 20 points. After adding up the results, the minimum and maximum scores required to earn for the individual grades are the following: minimum 91 points for A, 81-90 points for B, 71-80 points for C, 61-70 points for D and 51-60 points for E.

Results of education:
The student having taken the course is in the first place familiar with the definition of topological and metric spaces. He is able to generalize the conceptual system of real analysis related to limits. Thus, he has a good understanding of the theory of general Banach spaces arising in natural ways. He can declare the most important theorems, such as the Banach fixed-point theorem and is able to draw up the main steps of their proof.

Brief syllabus:
The concept of metric space. The Cartesian product of finite metric spaces. Environment of the point , open and closed sets. Topological space. Mapping limits. Sequence convergence. Cauchy sequences. Complete metric spaces. Compact and coherent metric spaces. Continuous mappings. Properties of functions continuous on compact coherent sets. The Banach fixed-point theorem. An overview of the historical development of the function concept.

Literature:
T. Šalát: Metrické priestory, ALFA 1981. 291s.
G. J. Šilov: Matematická analýza, ALFA 1974. 431s.

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

Notes:

Evaluation of subjects
Total number of evaluated students: 69

A	B	C	D	E	FX
13.04	40.58	18.84	17.39	10.14	0.0

Teacher: Mgr. Sándor Kelemen, PhD.

Date of last update: 29.06.2016
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ CPST/15	**Name:** Cvičenia z pravdepodobnosti a štatistiky
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: The course is finished by a written exam. For assessment A should be obtained at least 90 points, for assessment B at least 80 points, for assessment C at least 70 points, for assessment D at least 60 points, for assessment E at least 50 points. The assessment will count points earned by individual work (20%).	
Results of education: After successful completion of the course students are able to apply formulas to calculate probability of events and to apply the methods of descriptive statistics in solving tasks. The student knows the different types of random variables to describe random events and calculate its numerical characteristics. Students master the basic methods of descriptive statistics to analyze the results of random experiments.	
Brief syllabus: 1. Random events. Operations with random events. 2. Probability of random events. 3. Applying conditional and total probability in problems. 4. Independence of events. Calculations with Bernoulli scheme. 5. Probability density function of random variable. 6. Characteristics of random variable. 7. Expected value and standard deviation of the discrete distribution. Calculation of probability. 8. Probability density function, expected value, standard deviation of the continuous distribution. Calculation of probability. 9. Application of Laws of large numbers. 10. Methods of descriptive statistics. Analysis of the results of random experiment. 11. Frequency analysis and graphical display of data. 12. Measures of central tendency and variability. 13. Statistical relationship between data.	
Literature: Bukor J., Árki Z., Fehér Z.: Valószínűségszámítás. 1. vyd. Komárom : Selye János Egyetem. 2010. 120s. ISBN 978-80-89234-94-3. Obádovics, Gy.: Valószínűségszámítás és matematikai statisztika, SCOLAR, Budapest, 2003. 302 s. ISBN 963 9534 005. Nemetz T., Wintshe G.: Valószínűségszámítás és statisztika mindenkinek. - Szeged : Bolyai Intézet POLYGON, 1999. 243 s. ISBN 0002544. Nemetz T.: Valószínűségszámítás : Speciális matematika tankönyvek. - 4., változatlan utánnyomás. - Budapest : Typotex kiadó, 2010. 292 s. ISBN 978 963 279 164 7. Nagy-György J., Oszténiné Krauczi É., Székely L.: Valószínűségszámítás és statisztika példatár. - 3. vyd. - Szeged : Szegedi Egyetemi Kiadó POLYGON, 2010. - 111 s. ISSN 1417-0590.	

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

Notes:

Evaluation of subjects
Total number of evaluated students: 1

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

Teacher: RNDr. Zoltán Fehér, PhD., Mgr. Ladislav Jaruska, PhD.

Date of last update: 29.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ DEM/15	**Name:** History of Mathematics
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 3.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: During the semester, each student prepares a presentation on the selected period of the history of mathematics and/or a famous mathematician. Students are evaluated on the basis of this report, worth maximum 20 points, and their active participation in seminars, worth maximum 5 points. The minimum scores required to earn for the individual grades are the following: 19 points for A, 17 points for B, 15 points for C, 13 points for D and minimum 11 points for E. If these conditions are not met, a written exam worth maximum 20 points can be taken during the examination period.	
Results of education: The student knows the most important periods of the historical development of mathematics and its famous representatives from the ancient times to the 20th century. He understands the developmental relations of mathematical concepts in terms of phylogenesis and ontogenesis, and is able to apply his knowledge of the history of mathematics as a motivational tool in teaching mathematics.	
Brief syllabus: What impacts had enforced the development of mathematics? Mathematics in prehistoric times and ancient civilizations (Egypt, Mesopotamia). Mathematics in the Ancient Greece and the relation with the development of philosophy (logic, paradoxes, doubling the cube, squaring the circle, elements of Euclid, Archimedes, ...). Mathematics in China and India. Mathematics in the medieval and Renaissance era, relationship with the mathematics of the Arabs. Mathematics of the modern times – development of the various branches of mathematics.	
Literature: Znám, Š. a kol.: Pohľad do dejín matematiky, Bratislava : ALFA, 1986. 239s. Sain, M.: Nincs királyi út, Gondolat, Budapest, 1986. ISBN 963 281 7044. Sain, M: Matematikatörténeti ABC, Typotex Kiadó, 1993. 328 s. ISBN 963 7546 41 3. Kofler, E.: Fejezetek a Matematika Történetéből, 1. vyd. - Budapest : Franklin-nyomda, 1965. - 282 s. Juskevics A.P.: A középkori matematika története, - 1. vyd. - Budapest : Gondolat, 1982. - 470s. - ISBN 963 281 088 0. Mankiewicz, R.: A matematika históriája, HVG RT., Budapest, 2003. - 196 s. - ISBN 9637525300.	

Szabó Á.: A görög matematika kibontakozása, Magvető Kiadó, Budapest, 1978. - 250s. - ISBN 963 240 786 9.
Filep, L.: A tudományok királynője : A matematika fejlődése, Typotex Kiadó, 2001. - 510 s. - ISBN 963 7546 83 9.

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

Notes:

Evaluation of subjects
Total number of evaluated students: 87

A	B	C	D	E	FX
55.17	39.08	3.45	1.15	1.15	0.0

Teacher: RNDr. Peter Csiba, PhD.

Date of last update: 29.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ DIF/15	**Name:** Diferenciálne rovnice
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 3.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: During the semester, students write two written tests, each worth 20 points. Following that, the exam consists of a written part, worth 40 points, and an oral part, worth 20 points. After adding up the results, the minimum and maximum scores required to earn for the individual grades are the following: minimum 91 points for A, 81-90 points for B, 71-80 points for C, 61-70 points for D and 51-60 points for E.	
Results of education: The student is able to model elementary processes of natural sciences with ordinary differential equations. He recognizes typical solvable differential equations and can find their solutions. Besides, he knows and is able to apply theorems related to the existence and uniqueness of solutions for general, first-order ordinary differential equations.	
Brief syllabus: Interpretation of the differential equation and its solution. Practical tasks in the areas of physics, chemistry and biology, the processes of which can be described by primary or secondary differential equations. Basic methods of solving ordinary differential equations in the class of explicit first order, homogeneous, exact and linear differential equations with separable variable. Solving method of the Bernoulli, Ricatti, Lagrange and Clairaut differential equations. Solving method of second order, linear differential equations with constant coefficients. Euler's second order differential equation with variable coefficients. Theorems related to the existence of local solutions for general, first-order differential equations and the uniqueness of their solution.	
Literature: I. N. Bronstejn, K.A. Szemengyajev, G. Musiol, H. Mühlig: Matematikai kézikönyv, Typotex, 2002. 1210s. ISBN 963 9326 53 4. G. B. Thomas: Thomas-féle KALKULUS II. kötet, Typotex, 2010. 360 s. ISBN 978 963 279 159 3.	
Language, knowledge of which is necessary to complete a course: hungarian	
Notes:	
Evaluation of subjects	

Total number of evaluated students: 0

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

Teacher: Mgr. Sándor Kelemen, PhD.

Date of last update: 29.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ DM1/15	**Name:** Didaktika matematiky 1
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 1 / 2 / 0 **For the study period:** 13 / 26 / 0 **Methods of study:** present	
Number of credits: 5	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: During the semester the student is actively involved in the learning process. The condition for passing the course is to develop and realize the teaching outputs according to the instructions the teacher and passing an oral examination.	
Results of education: The students will obtain an overview of the basic aims of mathematics education and educational goals of teaching mathematics. They have an opportunity to present their own vision of introducing selected concepts of mathematics.	
Brief syllabus: Cognitive process, its stages and deformation. Child development and learning process. Parallel of phylogeny and ontogeny of mathematical thinking. Language of mathematics as a methodological problem, the volume concept. Didactic analysis of thematic units: algebraic expressions, number theory, mathematical analysis, functions, infinitesimal analysis. The development of the basic concepts in these thematic units. Objectives of Mathematics, current status and topics of research. The objectives of the learning process in mathematics. The concept of mathematical education. Learning process in mathematics. Constructivism in mathematics taught. Motivation. Language of mathematics, its historical development and didactic meaning. The concept of number and the volume concept (integers, fractions, decimals, operations at the appropriate set of numbers). Classification in teaching mathematics.	
Literature: Hejný a kol.: Teória vyučovania matematiky 2, SPN, Bratislava, 1990. 560 s. ISBN 80-08-01344-3. Učebnice matematiky pre 2. stupeň ZŠ a stredné školy Szendrei J.: Gondolod, hogy egyre megy?, Typotex Kiadó, Budapest, 2005. 471 s. ISBN 963 9548 52 9. Ambrus, A.: Bevezetés a matematikadidaktikába, ELTE, Budapest, 1995. 200 s. ISBN 0005023. Richard Skemp: A matematikatanulás pszichológiája, Budapest: Gondolat, 1975. 410 s. ISBN 963 280 218 7. Časopisy: A matematika tanítása, Polygon	

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

Notes:

Evaluation of subjects
Total number of evaluated students: 85

A	B	C	D	E	FX
27.06	20.0	32.94	18.82	1.18	0.0

Teacher: RNDr. Zuzana Árki, PhD.

Date of last update: 19.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ DM2/15	**Name:** Didaktika matematiky 2
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 1 / 2 / 0 **For the study period:** 13 / 26 / 0 **Methods of study:** present	
Number of credits: 5	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: During the semester the student is actively involved in the learning process. The condition for passing the course is to develop and realize the teaching outputs according to the instructions the teacher and passing an oral examination.	
Results of education: Students will be prepared for situations that are experiencing the reality of school teaching in high school maths. They will be familiar with the various teaching techniques, methods of interpretation, they will work with textbooks and supplementary materials, testing various forms of written and oral exams. They learn to distinguish between expressions which help to students and which are harmful for teaching.	
Brief syllabus: Didactic analysis of specific thematic units: planimetry and stereometry, combinatorics, statistics and probability. Within these thematic units diagnostic analysis of student work and possible strategies of teachers' work. Motivation in teaching mathematics. Error in mathematics. Textbook as a guide of teacher and as a assist of pupils. Evaluation and classification. Preparing, analyzing and correcting of written clearance and tests.	
Literature: Hejný a kol.: Teória vyučovania matematiky 2, SPN, Bratislava, 1990. 560 s. ISBN 80-08-01344-3. Učebnice matematiky pre 2. stupeň ZŠ a stredné školy Szendrei J.: Gondolod, hogy egyre megy?, Typotex Kiadó, Budapest, 2005. 471 s. ISBN 963 9548 52 9. Ambrus, A.: Bevezetés a matematikadidaktikába, ELTE, Budapest, 1995. 200 s. ISBN 0005023. Richard Skemp: A matematikatanulás pszichológiája, Budapest: Gondolat, 1975. 410 s. ISBN 963 280 218 7. Časopisy: A matematika tanítása, Polygon	
Language, knowledge of which is necessary to complete a course: hungarian, slovak	
Notes:	

Evaluation of subjects
Total number of evaluated students: 82

A	B	C	D	E	FX
23.17	37.8	26.83	8.54	3.66	0.0

Teacher: RNDr. Zuzana Árki, PhD.

Date of last update: 19.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KMI/Mdm/ DM3/15	**Name:** Didaktika matematiky 3

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

Number of credits: 5

Recommended semester/trimester of study: 3.

Level of study: II.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

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

Notes:

Evaluation of subjects
Total number of evaluated students: 85

A	B	C	D	E	FX
34.12	9.41	29.41	14.12	11.76	1.18

Teacher: doc. RNDr. János Tóth, PhD., RNDr. Zuzana Árki, PhD.

Date of last update: 29.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ MS/15	**Name:** Mathematical softwares

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

Number of credits: 3

Recommended semester/trimester of study: 3.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
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Results of education:
.

Brief syllabus:
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Literature:
GeoGebra v praxi [elektronický zdroj] / zost. Peter Csiba. - Komárno : Univerzita J. Selyeho v Komárne, 2012. - 1 elektronický optický disk (CD-ROM). - Elektronický zborník. - ISBN 978-80-8122-067-8.

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

Notes:

Evaluation of subjects
Total number of evaluated students: 0

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

Teacher: RNDr. Peter Csiba, PhD.

Date of last update: 19.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ ODP/15	**Name:** Diplomová práca a jej obhajoba
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 4	
Recommended semester/trimester of study:	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects

Total number of evaluated students: 2

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

Teacher:
Date of last update: 29.06.2016
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ PPX2/15	**Name:** Pedagogická prax 2
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week: For the study period:** 20s **Methods of study:** present	
Number of credits: 4	
Recommended semester/trimester of study:	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	
Evaluation of subjects Total number of evaluated students: 6	

a	n
100.0	0.0

Teacher: doc. RNDr. Ferdinánd Filip, PhD., RNDr. Zuzana Árki, PhD.
Date of last update: 19.06.2016
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ PPX4/15	**Name:** Pedagogická prax 4
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week: For the study period:** 40s **Methods of study:** present	
Number of credits: 4	
Recommended semester/trimester of study: 4.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects
Total number of evaluated students: 2

a	n
100.0	0.0

Teacher: doc. RNDr. Ferdinánd Filip, PhD.
Date of last update: 29.06.2016
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ PST/15	**Name:** Pravdepodobnosť a základy štatistiky

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

Number of credits: 5

Recommended semester/trimester of study: 1.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
The course is finished by a written exam.
For assessment A should be obtained at least 90 points, for assessment B at least 80 points, for assessment C at least 70 points, for assessment D at least 60 points, for assessment E at least 50 points.
The assessment will count points earned by individual work (20%).

Results of education:
The successful completion of the course gives basic knowledge from probability theory and an overview of descriptive statistics methods. The student understands the basic concepts and know about the different formulas for calculating probability. Using random variables the student describes random events and calculate its numerical characteristics. Students master the basic methods of descriptive statistics to analyze the results of random experiments.

Brief syllabus:
1. Random events. Operations with random events. 2. Probability of random events. Definition of the probability. The Kolmogorovs field of probability. 3. Conditional and total probability. Bayes theorem. 4. Independence of events. Bernoulli scheme. 5. Random variable. Probability distribution, probability density function. 6. Characteristics of random variable. 7. Discrete distributions. Expected value and standard deviation. Calculations of probability. 8. Continuous distributions. Probability density function, expected value and standard deviation. Calculations of probability. 9. Laws of large numbers. Central limit theorem. 10. Introduction to descriptive statistics. Statistical methods of the analysis of random experiment. 11. Frequency analysis and graphical display of data. 12. Measures of central tendency and variability. 13. Statistical relationship between data.

Literature:
Bukor J., Árki Z., Fehér Z.: Valószínűségszámítás. 1. vyd. Komárom : Selye János Egyetem Gazdaságtudományi Kara, 2010. - 120s. - ISBN 978-80-89234-94-3. Obádovics, Gy.: Valószínűségszámítás és matematikai statisztika, SCOLAR, Budapest, 2003. 302 s. ISBN 963 9534 005. Nemetz T., Wintshe G.: Valószínűségszámítás és statisztika mindenkinek. - Szeged : Bolyai Intézet POLYGON, 1999. - 243 s. ISSN 1218-4071. Nemetz T.: Valószínűségszámítás : Speciális matematika tankönyvek. - 4., változatlan utánnyomás. - Budapest : Typotex kiadó, 2010. - 292 s. - ISBN 978 963 279 164 7. Nagy-György J., Oszténiné Krauczi É., Székely

L.: Valószínűségszámítás és statisztika példatár. - 3. vyd. - Szeged : Szegedi Egyetemi Kiadó POLYGON, 2010. - 111 s. ISSN 1417-0590.

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

Notes:

Evaluation of subjects
Total number of evaluated students: 90

A	B	C	D	E	FX
7.78	13.33	27.78	22.22	25.56	3.33

Teacher: RNDr. Zoltán Fehér, PhD.

Date of last update: 19.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ SDM1/15	**Name:** Seminars on the Didactics of Mathematics 1

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

Number of credits: 3

Recommended semester/trimester of study: 1.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
During the semester the student is actively involved in the learning process. The condition for passing the course is to develop and realize the teaching outputs according to the instructions the teacher and passing an oral examination.

Results of education:
The students will obtain an overview of the basic aims of mathematics education and educational goals of teaching mathematics. They have an opportunity to present their own vision of introducing selected concepts of mathematics.

Brief syllabus:
Cognitive process, its stages and deformation.
Child development and learning process.
Parallel of phylogeny and ontogeny of mathematical thinking.
Language of mathematics as a methodological problem, the volume concept.
Didactic analysis of thematic units: algebraic expressions, number theory, mathematical analysis, functions, infinitesimal analysis. The development of the basic concepts in these thematic units.
Objectives of Mathematics, current status and topics of research. The objectives of the learning process in mathematics. The concept of mathematical education. Learning process in mathematics. Constructivism in mathematics taught. Motivation. Language of mathematics, its historical development and didactic meaning. The concept of number and the volume concept (integers, fractions, decimals, operations at the appropriate set of numbers). Classification in teaching mathematics.

Literature:
Hejný a kol.: Teória vyučovania matematiky 2, SPN, Bratislava, 1990. 560 s. ISBN 80-08-01344-3.
Učebnice matematiky pre 2. stupeň ZŠ a stredné školy
Szendrei J.: Gondolod, hogy egyre megy?, Typotex Kiadó, Budapest, 2005. 471 s. ISBN 963 9548 52 9.
Ambrus, A.: Bevezetés a matematikadidaktikába, ELTE, Budapest, 1995. 200 s. ISBN 0005023.
Richard Skemp: A matematikatanulás pszichológiája, Budapest: Gondolat, 1975. 410 s. ISBN 963 280 218 7.
Časopisy: A matematika tanítása, Polygon

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

Notes:

Evaluation of subjects
Total number of evaluated students: 1

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

Teacher: RNDr. Zuzana Árki, PhD.

Date of last update: 29.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ SDM2/15	**Name:** Seminars on the Didactics of Mathematics 2
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: During the semester the student is actively involved in the learning process. The condition for passing the course is to develop and realize the teaching outputs according to the instructions the teacher and passing an oral examination.	
Results of education: The students will obtain an overview of the basic aims of mathematics education and educational goals of teaching mathematics. They have an opportunity to present their own vision of introducing selected concepts of mathematics.	
Brief syllabus: Didactic analysis of specific thematic units: planimetry and stereometria, combinatorics, statistics and probability. Within these thematic units diagnostic analysis of student work and possible strategies of teachers' work. Motivation in teaching mathematics.	
Literature: Hejný a kol.: Teória vyučovania matematiky 2, SPN, Bratislava, 1990. 560 s. ISBN 80-08-01344-3. Učebnice matematiky pre 2. stupeň ZŠ a stredné školy Szendrei J.: Gondolod, hogy egyre megy?, Typotex Kiadó, Budapest, 2005. 471 s. ISBN 963 9548 52 9. Ambrus, A.: Bevezetés a matematikadidaktikába, ELTE, Budapest, 1995. 200 s. ISBN 0005023. Richard Skemp: A matematikatanulás pszichológiája, Budapest: Gondolat, 1975. 410 s. ISBN 963 280 218 7. Časopisy: A matematika tanítása, Polygon	
Language, knowledge of which is necessary to complete a course: hungarian, slovak	
Notes:	
Evaluation of subjects Total number of evaluated students: 2	

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

Teacher: RNDr. Zuzana Árki, PhD.

Date of last update: 29.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ STC/15	**Name:** Seminár z teórie čísel
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: The exam consists of a written part worth 80 points and an oral part worth 20 points. After adding up the results, the minimum and maximum scores required to earn for the individual grades are the following: minimum 91 points for A, 81-90 points for B, 71-80 points for C, 61-70 points for D and 51-60 points for E.	
Results of education: The course is designed to introduce the basic arithmetic function and show the existing relationships between them. The most important theorems related to the distribution of number theory functions are also presented as well as the most important formulas regarding the distribution of prime numbers.	
Brief syllabus: Arithmetic functionc. Multiplicative arithmetic functions. Dirichlet multiplication. Möbius inversion formula. Mean value and distribution of number theory functions. Distribution of prime numbers, divergence of the reciprocal sum of prime numbers, asymptotic density of the set of prime numbers.	
Literature: Šalát a kol.: Algebra a teoretická aritmetika 2, Bratislava, Alfa 1986 Znám: Teória čísel, Alfa, Bratislava, 1977 László, B. - Tóth, J.: Bevezetés a számelméletbe, Lilium Aurum, 1999 Erdős, P. - Surányi, J.: Vállogatott fejezetek a számelméletből, Polygon, Szeged, 1996 Freud, R. a kol.: Számelmélet, Nemzeti Tankönyvkiadó, Budapest, 2000. ISBN 9631907848 Bege, A. a kol.: Számelméleti feladatgyujtemény, Scientia Kiadó, Kolozsvár, 2002. ISBN 0991493	
Language, knowledge of which is necessary to complete a course: hungarian, slovak	
Notes:	
Evaluation of subjects Total number of evaluated students: 9	

A	B	C	D	E	FX
22.22	11.11	22.22	11.11	33.33	0.0
Teacher:					
Date of last update: 29.06.2016					
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ STP/15	**Name:** Štatistika v praxi
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: The course is finished by a written exam. For assessment A should be obtained at least 90 points, for assessment B at least 80 points, for assessment C at least 70 points, for assessment D at least 60 points, for assessment E at least 50 points. The assessment will count points earned by individual work (20%).	
Results of education: The successful completion of the course gives an overview of inductive statistics methods and students obtain skills to work in computer systems. The student understands the basic concepts of the theory of estimations, of hypothesis testing and correlation and regression analysis. Students are able to apply theoretical knowledge to discover the real, social and other processes and also in practical evaluation of research results in various fields. Students master the use of statistical software to analyze statistical data.	
Brief syllabus: 1. Basic concepts of inductive statistics. Population and sample. 2. Theory of estimations. Point estimation, basic properties of estimators. Maximum likelihood method. Applications. 4. Interval estimations. Confidence interval for the mean, variance, ratio. 5. Estimations in computer systems. 6. Hypothesis testing. Parametric and non-parametric tests. 7. Hyppothesis testing of parameters of Normal distribution, and Bimomial Distribution. 8. Non-parametric tests of normality and independence. 9. Hypothesis testing in computer systems. 10. Correlation analysis. Correlation coefficient. 11. Linear regression model. 12. Correlation and regression analysis in computer systems.	
Literature: Petres T.: Statisztika. Szeged : JATEPress, 2003. 272s. ISBN 0242073. Petres T.: Statisztika feladatgyűjtemény. Szeged : JATEPress, 2003. 85 s. ISBN 0202412. Borovkov A. A.: Matematikai statisztika: Paraméterek becslése, Hipotézisvizsgálat. 1. vyd. Budapest : Typotex Elektronikus Kiadó Kft., 1999. 633 s. ISBN 978-963-279-707-6. Lukács O.: Matematikai statisztika. Budapest : Műszaki Könyvkiadó, 2003. 570 s. ISBN 963 16 3036 6.	
Language, knowledge of which is necessary to complete a course: hungarian	
Notes:	

Evaluation of subjects
Total number of evaluated students: 75

A	B	C	D	E	FX
6.67	12.0	25.33	28.0	22.67	5.33

Teacher: RNDr. Zoltán Fehér, PhD.

Date of last update: 19.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ TC/15	**Name:** Teória čísel

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

Number of credits: 5

Recommended semester/trimester of study: 2.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
The exam consists of a written part worth 80 points and an oral part worth 20 points. After adding up the results, the minimum and maximum scores required to earn for the individual grades are the following: minimum 91 points for A, 81-90 points for B, 71-80 points for C, 61-70 points for D and 51-60 points for E.

Results of education:
The student understands the Cantor series development of real numbers and is able to determine the g-adic form of rational numbers. He is able to define the continued fraction form of rational and second-degree algebraic numbers. The student gains an insight into the theory of Diophantine approximation. He knows the concepts of asymptotic and logarithmic density and the relationship between them, and is able to define the asymptotic density of some specific sets.

Brief syllabus:
Real numbers in the Cantor series, conditions of rationality and irrationality. Continued fractions. Algebraic and transcendental numbers, the transcendence of e. Diophantine approximation, Dirichlet theorem, approximality of algebraic numbers. Liouville numbers. Asymptotic and logarithmic density of sets.

Literature:
Šalát a kol.: Algebra a teoretická aritmetika 2, Bratislava, Alfa 1986
Znám: Teória čísel, Alfa, Bratislava, 1977
László, B. - Tóth, J.: Bevezetés a számelméletbe, Lilium Aurum, 1999
Erdős, P. - Surányi, J.: Válogatott fejezetek a számelméletből, Polygon, Szeged, 2004. 327s.
Freud, R. a kol.: Számelmélet, Nemzeti Tankönyvkiadó, Budapest, 2000. ISBN 9631907848
Bege, A. a kol.: Számelméleti feladatgyujtemény, Scientia Kiadó, Kolozsvár, 2002. ISBN 0991493

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

Notes:

Evaluation of subjects
Total number of evaluated students: 97

A	B	C	D	E	FX
18.56	19.59	20.62	18.56	22.68	0.0
Teacher: Dr. habil. László Szalay, DSc.					
Date of last update: 19.06.2016					
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ UMS/15	**Name:** Úlohy v matematických súťažiach
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	
Evaluation of subjects Total number of evaluated students: 11	
a	n
100.0	0.0
Teacher: Mgr. Ladislav Jaruska, PhD., PaedDr. József Kalácska	
Date of last update: 29.06.2016	
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.	

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/Mdm/ŠSMgr/15	**Name:** Matematika - predmet štátnej skúšky
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study:	
Level of study: II.	
Prerequisites: KMI/Mdm/DM1/15 and KMI/Mdm/PST/15 and KMI/Mdm/DM2/15 and KMI/Mdm/TC/15 and KMI/Mdm/DM3/15 and KMI/Mdm/PPX4/15	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects

Total number of evaluated students: 2

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

Teacher:
Date of last update: 29.06.2016
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KMI/ MdmPPX3/15	**Name:** Pedagogická prax 3
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week: For the study period:** 20s **Methods of study:** present	
Number of credits: 4	
Recommended semester/trimester of study:	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	
Evaluation of subjects Total number of evaluated students: 0	
a	n
0.0	0.0
Teacher: doc. RNDr. Ferdinánd Filip, PhD.	
Date of last update: 29.06.2016	
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.	

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KPD/ NPM/14	**Name:** Nonprofit manažment

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

Number of credits: 1

Recommended semester/trimester of study: 1.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
Oral examination in which the students prove their theoretical knowledge, problem-sensitivity and informedness. An essay can be equivalent (by prior arrangement).

Results of education:
The course is designed to introduce students the basics of civil society, particularly the non-profit specifics. The student has an extensive knowledge of the non-profit sector, • The student has an extensive knowledge of civil organizations and attitude, • The student knows the basic details of the non-profit sector.

Brief syllabus:
1. Civil society and non-profit sector – introduction. 2. Civil basics, definitions, theories, 3. Volunteering, public benefit, two-dimensional evaluation, 4. Types of non-profit organizations 5. Nonprofit data. 6. Organization managemenent: organization dynamics, organizational culture 7. Strategic planning, strategy theory , 8. The strategy development process, 9-10. The strategic document 11 deciosion-making, negotiations 12. creative methods, 13 Summary

Literature:
Nagy-Nizák-Vercseg: Civil társadalom – Nonprofit világ, UISZ Alapítvány, Budapest, 2014

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

Notes:

Evaluation of subjects
Total number of evaluated students: 57

A	B	C	D	E	FX
12.28	57.89	22.81	3.51	3.51	0.0

Teacher: Dr. habil. Ádám István Nagy, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KPD/ NPM2/14	**Name:** Nonprofit manažment 2

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

Number of credits: 1

Recommended semester/trimester of study: 2.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
Active participtionand oral examination. An essay can be equivalent (by prior arrangement).

Results of education:
The course is designed to: enable the student to use project management methodology, particularly to non-profit specifics.
Learning outcomes and competences: the student will be able to use the basics of project planning

Brief syllabus:
1. Civil society and non-profit sector – intoduction, 2. Thee kick-off document 3. Project goal and integration management. 4-5. Project Human Resource Management 6-7. Project Financial Management 8-9. Project Human Resource Management 10. Project Time Management, 11 Project Risk Management 12 13 Project Communications Management 13. Summary

Literature:
Nagy-Nizák-Vercseg: Civil társadalom – Nonprofit világ, UISZ Alapítvány, Budapest, 2014
www.minedu.sk
www.eurostadt.eu.com
www.foruminst.sk

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

Notes:
Lecture with interactive techniques

Evaluation of subjects
Total number of evaluated students: 10

A	B	C	D	E	FX
10.0	50.0	20.0	10.0	10.0	0.0

Teacher: Dr. habil. Ádám István Nagy, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KPD/SZdm/ HPP/15	**Name:** Formulation and evaluation of educational programs

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

Number of credits: 2

Recommended semester/trimester of study: 1.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
The courseconcludeswith an assessment. The studentassessmentduringthesemester is an independentwork, forwhichcanreceive 60 points. The semesterfinalassessment is toprotectthiswork, forwhichcanget 40 points. The ratingscale: A - 90 100% B - 80% -89 C - -79 70%, D - 60 to 69%, E - 50 -59%.

Results of education:
Studentswill be ableto: -understand and tellthestepsthepreparation of educationalprograms - applythesestepsinpracticaltasks - toevaluatethequality of aneducational program.

Brief syllabus:
The concept and elements of theeducational program. Stepstoelaboratethe project. Project-design methods and tools. The analysis of needs and targetgroups. Education goalas a basisforplanning. Taxonomy of educationalobjectivesinthepreparation of educationalprograms. The evaluationasa part of theeducational program. The curriculum and syllabuspreparation, limiting factors.

Literature:
Prášilová Michaela. Tvorba vzdělávacího programu. - 1. vyd. - Praha : TRITON, 2006. - 191 s. - ISBN 80-7254712-7.
Pasch, Marvin, Gardner, Trevor G. 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:
Hungarian or Slovak Language

Notes:

Evaluation of subjects
Total number of evaluated students: 62

A	B	C	D	E	FX
59.68	20.97	9.68	1.61	8.06	0.0

Teacher: Dr. habil. PaedDr. Kinga Horváth, PhD., Dr. habil. Ádám István Nagy, PhD., Dr. habil. Ing. István Szőköl, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/SZdm/ KSA/15	**Name:** Cultural and Social Anthropology
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: If students fulfill the subject they will have suitable knowledge about the study of etnography. They will get practical competences too, which they can apply in their future pedagogical practices.	
Brief syllabus: What is etnography? What does cultural and social antropology mean? What is European etnology? The description of the Hungarian folk art, a short historical review of European etnography and etnology, the sources of etnography 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.	
Literature: 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 (http://www.ludovakultura.sk/index.php?id=11) Voigt Vilmos: Alapismereti bevezetés a néprajz iránt érdeklődő hallgatóknak. Debrecen: Kossuth Lajos Tudományegyetem Néprajzi Tanszék 1989 /Néprajz egyetemi hallgatóknak 1./	
Language, knowledge of which is necessary to complete a course: Hungarian or Slovak Language	
Notes:	
Evaluation of subjects	

Total number of evaluated students: 124

A	B	C	D	E	FX
30.65	29.03	24.19	13.71	2.42	0.0

Teacher: Dr. habil. PhDr. József Liszka, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/SZdm/ MEP/15	**Name:** Methodology of pedagogical research
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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	
Results of education: 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.	
Brief syllabus: 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	
Literature: 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	
Language, knowledge of which is necessary to complete a course: Hungarian or Slovak Language	
Notes:	
Evaluation of subjects Total number of evaluated students: 360	

A	B	C	D	E	FX
20.28	18.89	17.22	18.89	20.0	4.72

Teacher: prof. Dr. András Németh, DSc., Dr. habil. Ing. István Szőköl, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/SZdm/ PEP/15	**Name:** Educational psychology
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: 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.	
Brief syllabus: 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.	
Literature: Bagdy Emôke: 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	
Language, knowledge of which is necessary to complete a course: Hungarian or Slovak Language	
Notes:	
Evaluation of subjects Total number of evaluated students: 403	

A	B	C	D	E	FX
49.38	20.84	12.41	8.68	7.2	1.49
Teacher: Dr. habil. Vilmos Vass, PhD.					
Date of last update: 14.06.2016					
Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.					

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/SZdm/ POP/15	**Name:** Comparative Education
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: Evolution: A – 90 -100%, B – 80 -89%, C – 70 -79%, D – 60 - 69%, E – 50 -59%.	
Results of education: Student has studied the educational program sin the European context, methodology of comaparative education analyzing the data of PISA and OECD monitoring.	
Brief syllabus: 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.	
Literature: 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	
Language, knowledge of which is necessary to complete a course: Hungarian or Slovak Language	
Notes:	

Evaluation of subjects
Total number of evaluated students: 255

A	B	C	D	E	FX
39.61	34.51	20.78	3.92	1.18	0.0

Teacher: Dr. habil. Vilmos Vass, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/SZdm/ PSO/15	**Name:** Psychology of Personality
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%.	
Results of education: Studentwilllearnabouttherepresentants and trendswithinthepersonalitypsychology, suchastypology, structure of personality and aboutthestrong and weaksides of thepersonaityaffectingsuccesint he school.	
Brief syllabus: Definition of thespecialpsychologicaldiscipline, basicterms. Representants and theirtheories: Hyppocrates, Pavlov, Jung, Eysenck. Rogers, Gordon. Structure of personality. Gardner: multifactorintelligence, Emotionalintelligence and itsdevelopmentint he school. Psycho-pathology. Coping and healthypersonality.	
Literature: Calvin S. Hall, Gardner Lindzey, John C. Loehlin, Martin Manosevitz: Psychológia osobnosti : Úvod do teórií 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 Jenô:Az érzelem és a jellem lélektanáról. Budapest : Okker Kiadó, 2003. 304. ISBN 9637315780. Ranschburg Jenô: Pszichológiai rendellenességek gyermekkorban. Budapest : Nemzeti Tankönyvkiadó, 1998. 200 s. ISBN 9631927008	
Language, knowledge of which is necessary to complete a course: Hungarian or Slovak Language	
Notes:	
Evaluation of subjects Total number of evaluated students: 413	

A	B	C	D	E	FX
39.71	26.15	24.94	7.51	1.69	0.0

Teacher: prof. Dr. Béla István Pukánszki, DSc., PaedDr. Terézia Strédl, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/SZdm/ PSV/15	**Name:** Personal and social education in lifelong learning

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

Number of credits: 3

Recommended semester/trimester of study: 2.

Level of study: II.

Prerequisites:

Conditions for passing the subject:
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 successfull to pass the class. A mark – 90 -100%, B mark – 80 -89%, C mark – 70 -79%, D mark – 60 - 69%, E mark – 50 -59%

Results of education:
Students will acqire the fundamentals of lifelong learning and also the personal and social competences to perform as an educational professional

Brief syllabus:
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 pulils. individual approach of teacher to the pupil

Literature:
Albert Alexander, Turek Ivan: O zbližovaní 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

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

Notes:

Evaluation of subjects
Total number of evaluated students: 413

A	B	C	D	E	FX
48.91	27.6	17.68	4.36	1.45	0.0

Teacher: prof. Dr. Béla István Pukánszki, DSc.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/SZdm/ RAS/15	**Name:** Family and School
Types, range and methods of educational activities: **Form of study:** Lecture **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 2.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: 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%	
Results of education: 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 enviroment of children	
Brief syllabus: Family and school as basic educational institutions. Enviroment 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	
Literature: 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 Spéder Zsolt: Család és népesség-itthon és Európában. Budapest : Sajtóház Kiadó, 2003. 562. ISBN 9639211613 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 Gyôrgy: 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
Mérei, F.: Társ és csoport, Akadémiai Kiadó, Budapest, 1989
Satirová, V.: Kniha o rodine, SVAN Praha, 1994
Rozinajová, H.: Pedagogika rodinného života, SPN Bratislava, 1988

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

Notes:

Evaluation of subjects
Total number of evaluated students: 320

A	B	C	D	E	FX
23.44	24.38	17.5	13.75	19.38	1.56

Teacher: Dr. habil. Ádám István Nagy, PhD., Dr. habil. Dr. Mária Magdolna Németh, CSc.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KPD/SZdm/ TPO/15	**Name:** Theoretical knowledge of the field of study
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study:	
Level of study: II.	
Prerequisites: 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/PEP/15 and KPD/SZdm/KSA/15 and KPD/SZdm/PSV/15	
Conditions for passing the subject: 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%.	
Results of education: 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.	
Brief syllabus: Thesis: 1. The value system of traditional and innovative schools. The content of the curriculum and its innovation, project teaching 2. Concept of development of schools to reform education 3. Impact of the learning environment for the formation of independent learning in reform pedagogy. Principles of holistic education, Jena Plan or Dalton Plan. 4. The process of educational research and data collection in education research. 5. The functions of schools and their importance. 6. Management of schools, educational activities and financing of education. 7. Quality, standards and quality management systems 8. The objectives and methodology of self-assessment, vision and mission schools. 9. Comparative Education in the system of pedagogical sciences. 10. The importance of comparative pedagogy in teaching practice. 11. Reform education and personal development.	

12. The development of personality and the possibilities for its development.
13. Educational problems: difficulties, impairments, limitations
14. Intercultural and multicultural education - definition, development and dimensions.
15. The primary socialization
16. School socialization
17 socio-cultural environment
18. The processes of pedagogical diagnostics.
19. cooperation between schools and families.
20. The role of family and school in education.

Literature:
The compulsory and elective subjects is given subject data sheets.

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

Notes:

Evaluation of subjects
Total number of evaluated students: 3

A	B	C	D	E	FX
66.67	33.33	0.0	0.0	0.0	0.0

Teacher:

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KPD/SZdm/ TVZ/15	**Name:** Education technology

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

Number of credits: 1

Recommended semester/trimester of study:

Level of study: II.

Prerequisites:

Conditions for passing the subject:
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%.

Results of education:
Knowingaboutthephilosophy of informationsociety andcomparison of thetraditionalschool.

Brief syllabus:
Introduction - Description of thetraditionalschooleducation 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, bloging, video conferencing,

Literature:

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

Notes:

Evaluation of subjects
Total number of evaluated students: 582

A	B	C	D	E	FX
54.98	19.42	8.08	3.26	13.75	0.52

Teacher: Dr. habil. Ing. István Szőköl, PhD., Mgr. Ladislav Jaruska, PhD., Mgr. Katarína Szarka, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Education

Code: KMI/TEX/12 | **Name:** Typography Systems

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

Number of credits: 3

Recommended semester/trimester of study: 2.

Level of study: I., II.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

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

Notes:

Evaluation of subjects
Total number of evaluated students: 127

A	B	C	D	E	FX
45.67	29.92	19.69	2.36	2.36	0.0

Teacher: RNDr. Peter Csiba, PhD.

Date of last update: 19.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KTVŠ/ ŠPH1a/TV/12	**Name:** Sport games 1
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 1.	
Level of study: I., II.	
Prerequisites:	
Conditions for passing the subject: A (marked) 13 times in the PE lesson, B (marked) 12 times in the PE lesson, C (marked) 11 times in the PE lesson, D (marked) 10 times in the PE lesson, E (marked) 9 times in the PE lesson.	
Results of education: Create a personal need to moving. Basic elements, rule of the game, get to known different exercises. Motor skills development by specific exercises. Use new sport devices. PE moves practice. Use games, solve competition situations.	
Brief syllabus: Volleyball: Accident prevention information. Shape up the hit types (setting and bumping hits). Serving and passing. Hits from stand and move. Continuous hits over the net. Shape ups and attack hits. Attack and defense moves. Blocks and receiving the serves. 2-2 plays. 6-6 free plays. Making competition and play situations. Specific skill development. True play. Competitions. Football: Accident prevention information. Passing, ball use skill development. Passing and moving with ball. Shoots. Ball holding games 2-2, 3-2. Attacking moves with ball. Defensive moves. Tactical elements exercises. Skill development with ball. Setting place play. Play football with passing rules. Use tactical elements in play. Playing football with true rules. Play football matches. Swimming: Accident prevention information. Review basic swim exercises, skill assessment. Glides and breathing. Practice kicks with equipment. Practice Backstroke arm stoke and leg kick. Backstroke technique improve exercises. Practice freestyle arm stroke and leg kick. Freestyle breathing technique. Freestyle technique improve exercises. Practice breaststroke arm stroke and leg kick. Breaststroke breathing technique. Breaststroke technique improve exercises. Swimming sets. Long way workouts. Starts and turns. Swimming race. Table tennis: Accident prevention information. Set up the hitting technique. Forehand pushes, shots. Backhand pushes, shots. Serves, and counter hits. Continuously hitting to a marked side of the table with correct technique. Continuously play freely. Hitting strength and technique developing. Attacking and defensing moves, loop and push shots. Set up a continuously play. Directed hits. Changing side hitting. Plays. Competitions. Floorball: Accident prevention information. Rule of the sticks use and apply. Passes and ball receive. Ball control alone and passing in pairs. Shoots from standing. Shoots from moving and received ball shooting. Ball holding games. Attacking moves practicing. Defensive moves practicing. Tactical elements practicing. Fast attacking tactic practicing. Fast moves and received ball shooting. Playing floorball with rules. Competitions games. Fitness: Accident prevention	

information. Strength developing exercises for body shaping. Learn the correct set-up with exercises. Own body weight workouts, exercises with weights and workouts with fitness machines. Stretching skills workouts. Healthcare lifestyle. Aerobic: Accident prevention information. Musical dynamic workouts to improving cardiovascular endurance. Gymnastic with dancing elements. Hot-iron: Accident prevention information. Specific strengthening workouts. Developing endurance, fat burn strengthening muscles and bones, high up metabolism, reducing weight, bodybuilding with devices. Cross-fit: Accident prevention information. Specific strengthening workouts. Specific strengthening workouts. Developing endurance, fat burn strengthening muscles and bones, high up metabolism, reducing weight, bodybuilding own body weight workouts.

Literature:

Gál László, Sportjátékok II. (Sportjátékok elmélete és módszertana, kézilabdázás, röplabdázás) Nemzeti Tankönyvkiadó, 2003 ISBN:963 19 4584 7 Gál László, Kristóf László, Magyar György, Sportjátékok III. (Kosárlabdázás, labdarúgás, felkészítés-versenyzés) Nemzeti Tankönyvkiadó, Budapest, 1999 ISBN: 9631900215 FUTSAL Laws of the Game, http://www.fifa.com/mm/document/footballdevelopment/refereeing/51/44/50/lawsofthegamefutsal2014_15_eneu_neutral.pdf INTERNATIONAL FOOTBALL ASSOCIATION BOARD (IFAB), A labdarúgás játékszabályai 2014/2015 http://www.nemzetisport.hu/data/files/NSstatok/szabalykonyv_201415.pdf Tóth Ákos, Sós Csaba, Egressy János, Az úszás tankönyve, Semmelweis Egyetem Testnevelési és Sporttudományi Kar (Budapest) , 2008, ISBN: 9789637166945 Michael Brooks Developing Swimmers © 2011 ISBN-13: 9781450411455 Magyar asztalitenisz szövetség, Asztalitenisz szabálykönyv http://www.moatsz.hu/images/PDF/FTP/Szovetseg/szabalykonyvek/MOATSZ_szabalykonyv2012.pdf Magyar Röplabda Szövetség, A röplabdázás hivatalos játékszabályai 2015-2016, 2015. február http://www.mrszjt.hu/szab_terem/jatekszab.pdf Edi és Martin Bachmann: 1005 röplabda játék és gyakorlat - Kézikönyv tanároknak, edzőknek, versenyzőknek, Dialóg Campus, 2000 Walter Bucher: 704 kézilabda játék és gyakorlat - Kézikönyv tanároknak, edzőknek, versenyzőknek Dialóg Campus, 2002 Walter Bucher: 1014 Asztalitenisz játék és gyakorlat, Dialóg Campus, 2004 Nemzetközi Floorball Szövetség, Játékszabályok, Szabályok és értelmezésük http://www.hunfloorball.hu/_user/j%C3%A1t%C3%A9kszab%C3%A1lyok%202014.pdf

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

Hungarian or Slovak language

Notes:

Participation in the lessons.

Evaluation of subjects

Total number of evaluated students: 603

A	B	C	D	E	FX
64.18	10.95	13.76	3.48	7.46	0.17

Teacher: PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek, Péter Szabó, Mgr. Robin Pělucha, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KTVŠ/ ŠPH1b/TV/12	**Name:** Sport games 1
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 2.	
Level of study: I., II.	
Prerequisites:	
Conditions for passing the subject: A (marked) 13 times in the PE lesson, B (marked) 12 times in the PE lesson, C (marked) 11 times in the PE lesson, D (marked) 10 times in the PE lesson, E (marked) 9 times in the PE lesson.	
Results of education: Create a personal need to moving. Basic elements, rule of the game, get to known different exercises. Motor skills development by specific exercises. Use new sport devices. PE moves practice. Use games, solve competition situations.	
Brief syllabus: Volleyball: Accident prevention information. Shape up the hit types (setting and bumping hits). Serving and passing. Hits from stand and move. Continuous hits over the net. Shape ups and attack hits. Attack and defense moves. Blocks and receiving the serves. 2-2 plays. 6-6 free plays. Making competition and play situations. Specific skill development. True play. Competitions. Football: Accident prevention information. Passing, ball use skill development. Passing and moving with ball. Shoots. Ball holding games 2-2, 3-2. Attacking moves with ball. Defensive moves. Tactical elements exercises. Skill development with ball. Setting place play. Play football with passing rules. Use tactical elements in play. Playing football with true rules. Play football matches. Swimming: Accident prevention information. Review basic swim exercises, skill assessment. Glides and breathing. Practice kicks with equipment. Practice Backstroke arm stoke and leg kick. Backstroke technique improve exercises. Practice freestyle arm stroke and leg kick. Freestyle breathing technique. Freestyle technique improve exercises. Practice breaststroke arm stroke and leg kick. Breaststroke breathing technique. Breaststroke technique improve exercises. Swimming sets. Long way workouts. Starts and turns. Swimming race. Table tennis: Accident prevention information. Set up the hitting technique. Forehand pushes, shots. Backhand pushes, shots. Serves, and counter hits. Continuously hitting to a marked side of the table with correct technique. Continuously play freely. Hitting strength and technique developing. Attacking and defensing moves, loop and push shots. Set up a continuously play. Directed hits. Changing side hitting. Plays. Competitions. Floorball: Accident prevention information. Rule of the sticks use and apply. Passes and ball receive. Ball control alone and passing in pairs. Shoots from standing. Shoots from moving and received ball shooting. Ball holding games. Attacking moves practicing. Defensive moves practicing. Tactical elements practicing. Fast attacking tactic practicing. Fast moves and received ball shooting. Playing floorball with rules. Competitions games. Fitness: Accident prevention	

information. Strength developing exercises for body shaping. Learn the correct set-up with exercises. Own body weight workouts, exercises with weights and workouts with fitness machines. Stretching skills workouts. Healthcare lifestyle. Aerobic: Accident prevention information. Musical dynamic workouts to improving cardiovascular endurance. Gymnastic with dancing elements. Hot-iron: Accident prevention information. Specific strengthening workouts. Developing endurance, fat burn strengthening muscles and bones, high up metabolism, reducing weight, bodybuilding with devices. Cross-fit: Accident prevention information. Specific strengthening workouts. Specific strengthening workouts. Developing endurance, fat burn strengthening muscles and bones, high up metabolism, reducing weight, bodybuilding own body weight workouts.

Literature:

Gál László, Sportjátékok II. (Sportjátékok elmélete és módszertana, kézilabdázás, röplabdázás) Nemzeti Tankönyvkiadó, 2003 ISBN:963 19 4584 7 Gál László, Kristóf László, Magyar György, Sportjátékok III. (Kosárlabdázás, labdarúgás, felkészítés-versenyzés) Nemzeti Tankönyvkiadó, Budapest, 1999 ISBN: 9631900215 FUTSAL Laws of the Game, http://www.fifa.com/mm/document/footballdevelopment/refereeing/51/44/50/lawsofthegamefutsal2014_15_eneu_neutral.pdf INTERNATIONAL FOOTBALL ASSOCIATION BOARD (IFAB), A labdarúgás játékszabályai 2014/2015 http://www.nemzetisport.hu/data/files/NSstatok/szabalykonyv_201415.pdf Tóth Ákos, Sós Csaba, Egressy János, Az úszás tankönyve, Semmelweis Egyetem Testnevelési és Sporttudományi Kar (Budapest) , 2008, ISBN: 9789637166945 Michael Brooks Developing Swimmers © 2011 ISBN-13: 9781450411455 Magyar asztalitenisz szövetség, Asztalitenisz szabálykönyv http://www.moatsz.hu/images/PDF/FTP/Szovetseg/szabalykonyvek/MOATSZ_szabalykonyv2012.pdf Magyar Röplabda Szövetség, A röplabdázás hivatalos játékszabályai 2015-2016, 2015. február http://www.mrszjt.hu/szab_terem/jatekszab.pdf Edi és Martin Bachmann: 1005 röplabda játék és gyakorlat - Kézikönyv tanároknak, edzőknek, versenyzőknek, Dialóg Campus, 2000 Walter Bucher: 704 kézilabda játék és gyakorlat - Kézikönyv tanároknak, edzőknek, versenyzőknek Dialóg Campus, 2002 Walter Bucher: 1014 Asztalitenisz játék és gyakorlat, Dialóg Campus, 2004 Nemzetközi Floorball Szövetség, Játékszabályok, Szabályok és értelmezésük http://www.hunfloorball.hu/_user/j%C3%A1t%C3%A9kszab%C3%A1lyok%202014.pdf

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

Hungarian or Slovak language

Notes:

Participation in the lessons.

Evaluation of subjects

Total number of evaluated students: 526

A	B	C	D	E	FX
63.31	10.46	11.98	7.03	6.65	0.57

Teacher: PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek, Péter Szabó, Mgr. Robin Pělucha, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KTVŠ/ ŠPH2a/TV/12	**Name:** Sport games 2
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 1.	
Level of study: I., II.	
Prerequisites:	
Conditions for passing the subject: A (marked) 13 times in the PE lesson, B (marked) 12 times in the PE lesson, C (marked) 11 times in the PE lesson, D (marked) 10 times in the PE lesson, E (marked) 9 times in the PE lesson.	
Results of education: Create a personal need to moving. Basic elements, rule of the game, get to known different exercises. Motor skills development by specific exercises. Use new sport devices. PE moves practice. Use games, solve competition situations.	
Brief syllabus: Volleyball: Accident prevention information. Shape up the hit types (setting and bumping hits). Serving and passing. Hits from stand and move. Continuous hits over the net. Shape ups and attack hits. Attack and defense moves. Blocks and receiving the serves. 2-2 plays. 6-6 free plays. Making competition and play situations. Specific skill development. True play. Competitions. Football: Accident prevention information. Passing, ball use skill development. Passing and moving with ball. Shoots. Ball holding games 2-2, 3-2. Attacking moves with ball. Defensive moves. Tactical elements exercises. Skill development with ball. Setting place play. Play football with passing rules. Use tactical elements in play. Playing football with true rules. Play football matches. Swimming: Accident prevention information. Review basic swim exercises, skill assessment. Glides and breathing. Practice kicks with equipment. Practice Backstroke arm stoke and leg kick. Backstroke technique improve exercises. Practice freestyle arm stroke and leg kick. Freestyle breathing technique. Freestyle technique improve exercises. Practice breaststroke arm stroke and leg kick. Breaststroke breathing technique. Breaststroke technique improve exercises. Swimming sets. Long way workouts. Starts and turns. Swimming race. Table tennis: Accident prevention information. Set up the hitting technique. Forehand pushes, shots. Backhand pushes, shots. Serves, and counter hits. Continuously hitting to a marked side of the table with correct technique. Continuously play freely. Hitting strength and technique developing. Attacking and defensing moves, loop and push shots. Set up a continuously play. Directed hits. Changing side hitting. Plays. Competitions. Floorball: Accident prevention information. Rule of the sticks use and apply. Passes and ball receive. Ball control alone and passing in pairs. Shoots from standing. Shoots from moving and received ball shooting. Ball holding games. Attacking moves practicing. Defensive moves practicing. Tactical elements practicing. Fast attacking tactic practicing. Fast moves and received ball shooting. Playing floorball with rules. Competitions games. Fitness: Accident prevention	

information. Strength developing exercises for body shaping. Learn the correct set-up with exercises. Own body weight workouts, exercises with weights and workouts with fitness machines. Stretching skills workouts. Healthcare lifestyle. Aerobic: Accident prevention information. Musical dynamic workouts to improving cardiovascular endurance. Gymnastic with dancing elements. Hot-iron: Accident prevention information. Specific strengthening workouts. Developing endurance, fat burn strengthening muscles and bones, high up metabolism, reducing weight, bodybuilding with devices. Cross-fit: Accident prevention information. Specific strengthening workouts. Specific strengthening workouts. Developing endurance, fat burn strengthening muscles and bones, high up metabolism, reducing weight, bodybuilding own body weight workouts.

Literature:

Gál László, Sportjátékok II. (Sportjátékok elmélete és módszertana, kézilabdázás, röplabdázás) Nemzeti Tankönyvkiadó, 2003 ISBN:963 19 4584 7 Gál László, Kristóf László, Magyar György, Sportjátékok III. (Kosárlabdázás, labdarúgás, felkészítés-versenyzés) Nemzeti Tankönyvkiadó, Budapest, 1999 ISBN: 9631900215 FUTSAL Laws of the Game, http://www.fifa.com/mm/document/footballdevelopment/refereeing/51/44/50/lawsofthegamefutsal2014_15_eneu_neutral.pdf INTERNATIONAL FOOTBALL ASSOCIATION BOARD (IFAB), A labdarúgás játékszabályai 2014/2015 http://www.nemzetisport.hu/data/files/NSstatok/szabalykonyv_201415.pdf Tóth Ákos, Sós Csaba, Egressy János, Az úszás tankönyve, Semmelweis Egyetem Testnevelési és Sporttudományi Kar (Budapest) , 2008, ISBN: 9789637166945 Michael Brooks Developing Swimmers © 2011 ISBN-13: 9781450411455 Magyar asztalitenisz szövetség, Asztalitenisz szabálykönyv http://www.moatsz.hu/images/PDF/FTP/Szovetseg/szabalykonyvek/MOATSZ_szabalykonyv2012.pdf Magyar Röplabda Szövetség, A röplabdázás hivatalos játékszabályai 2015-2016, 2015. február http://www.mrszjt.hu/szab_terem/jatekszab.pdf Edi és Martin Bachmann: 1005 röplabda játék és gyakorlat - Kézikönyv tanároknak, edzőknek, versenyzőknek, Dialóg Campus, 2000 Walter Bucher: 704 kézilabda játék és gyakorlat - Kézikönyv tanároknak, edzőknek, versenyzőknek Dialóg Campus, 2002 Walter Bucher: 1014 Asztalitenisz játék és gyakorlat, Dialóg Campus, 2004 Nemzetközi Floorball Szövetség, Játékszabályok, Szabályok és értelmezésük http://www.hunfloorball.hu/_user/j%C3%A1t%C3%A9kszab%C3%A1lyok%202014.pdf

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

Hungarian or Slovakian language

Notes:

Participation in the lessons.

Evaluation of subjects

Total number of evaluated students: 445

A	B	C	D	E	FX
64.49	12.13	11.46	4.72	7.19	0.0

Teacher: PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek, Péter Szabó, Mgr. Robin Pělucha, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KTVŠ/ ŠPH2b/TV/12	**Name:** Sport games 2
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 1	
Recommended semester/trimester of study: 2.	
Level of study: I., II.	
Prerequisites:	
Conditions for passing the subject: A (marked) 13 times in the PE lesson, B (marked) 12 times in the PE lesson, C (marked) 11 times in the PE lesson, D (marked) 10 times in the PE lesson, E (marked) 9 times in the PE lesson.	
Results of education: Create a personal need to moving. Basic elements, rule of the game, get to known different exercises. Motor skills development by specific exercises. Use new sport devices. PE moves practice. Use games, solve competition situations.	
Brief syllabus: Volleyball: Accident prevention information. Shape up the hit types (setting and bumping hits). Serving and passing. Hits from stand and move. Continuous hits over the net. Shape ups and attack hits. Attack and defense moves. Blocks and receiving the serves. 2-2 plays. 6-6 free plays. Making competition and play situations. Specific skill development. True play. Competitions. Football: Accident prevention information. Passing, ball use skill development. Passing and moving with ball. Shoots. Ball holding games 2-2, 3-2. Attacking moves with ball. Defensive moves. Tactical elements exercises. Skill development with ball. Setting place play. Play football with passing rules. Use tactical elements in play. Playing football with true rules. Play football matches. Swimming: Accident prevention information. Review basic swim exercises, skill assessment. Glides and breathing. Practice kicks with equipment. Practice Backstroke arm stoke and leg kick. Backstroke technique improve exercises. Practice freestyle arm stroke and leg kick. Freestyle breathing technique. Freestyle technique improve exercises. Practice breaststroke arm stroke and leg kick. Breaststroke breathing technique. Breaststroke technique improve exercises. Swimming sets. Long way workouts. Starts and turns. Swimming race. Table tennis: Accident prevention information. Set up the hitting technique. Forehand pushes, shots. Backhand pushes, shots. Serves, and counter hits. Continuously hitting to a marked side of the table with correct technique. Continuously play freely. Hitting strength and technique developing. Attacking and defensing moves, loop and push shots. Set up a continuously play. Directed hits. Changing side hitting. Plays. Competitions. Floorball: Accident prevention information. Rule of the sticks use and apply. Passes and ball receive. Ball control alone and passing in pairs. Shoots from standing. Shoots from moving and received ball shooting. Ball holding games. Attacking moves practicing. Defensive moves practicing. Tactical elements practicing. Fast attacking tactic practicing. Fast moves and received ball shooting. Playing floorball with rules. Competitions games. Fitness: Accident prevention	

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Literature:

Gál László, Sportjátékok II. (Sportjátékok elmélete és módszertana, kézilabdázás, röplabdázás) Nemzeti Tankönyvkiadó, 2003 ISBN:963 19 4584 7 Gál László, Kristóf László, Magyar György, Sportjátékok III. (Kosárlabdázás, labdarúgás, felkészítés-versenyzés) Nemzeti Tankönyvkiadó, Budapest, 1999 ISBN: 9631900215 FUTSAL Laws of the Game, http://www.fifa.com/mm/document/footballdevelopment/refereeing/51/44/50/lawsofthegamefutsal2014_15_eneu_neutral.pdf INTERNATIONAL FOOTBALL ASSOCIATION BOARD (IFAB), A labdarúgás játékszabályai 2014/2015 http://www.nemzetisport.hu/data/files/NSstatok/szabalykonyv_201415.pdf Tóth Ákos, Sós Csaba, Egressy János, Az úszás tankönyve, Semmelweis Egyetem Testnevelési és Sporttudományi Kar (Budapest) , 2008, ISBN: 9789637166945 Michael Brooks Developing Swimmers © 2011 ISBN-13: 9781450411455 Magyar asztalitenisz szövetség, Asztalitenisz szabálykönyv http://www.moatsz.hu/images/PDF/FTP/Szovetseg/szabalykonyvek/MOATSZ_szabalykonyv2012.pdf Magyar Röplabda Szövetség, A röplabdázás hivatalos játékszabályai 2015-2016, 2015. február http://www.mrszjt.hu/szab_terem/jatekszab.pdf Edi és Martin Bachmann: 1005 röplabda játék és gyakorlat - Kézikönyv tanároknak, edzőknek, versenyzőknek, Dialóg Campus, 2000 Walter Bucher: 704 kézilabda játék és gyakorlat - Kézikönyv tanároknak, edzőknek, versenyzőknek Dialóg Campus, 2002 Walter Bucher: 1014 Asztalitenisz játék és gyakorlat, Dialóg Campus, 2004 Nemzetközi Floorball Szövetség, Játékszabályok, Szabályok és értelmezésük http://www.hunfloorball.hu/_user/j%C3%A1t%C3%A9kszab%C3%A1lyok%202014.pdf

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

Hungarian or Slovakian language

Notes:

Participation in the lessons.

Evaluation of subjects

Total number of evaluated students: 377

A	B	C	D	E	FX
63.66	11.67	10.88	6.37	7.43	0.0

Teacher: PaedDr. Beáta Dobay, PhD., PaedDr. Peter Židek, Péter Szabó, Mgr. Robin Pělucha, PhD.

Date of last update: 14.06.2016

Approved by: Guaranteedoc. RNDr. János Tóth, PhD.Guaranteeprof. Dr. Béla István Pukánszki, DSc.Guaranteedoc. RNDr. Róbert Gyepes, PhD.