

CONTENS

1. Anthropology II.....	2
2. Basics of Agricultural Production.....	41
3. Biology and Methodology of Teaching Biology.....	37
4. Development of the Earth and of Life on Earth.....	21
5. Diploma Thesis with Defense.....	6
6. Ecology.....	9
7. Environmental education.....	11
8. Ethology.....	13
9. Evolutionary Biology.....	15
10. Field Work in Agricultural Production.....	39
11. Genetics II.....	17
12. Geology.....	19
13. Global Problems of Environment.....	23
14. Health Promoting.....	43
15. Methodology of Teaching Biology.....	7
16. Methodology of Teaching Biology Practice.....	4
17. Microbiology.....	27
18. Molecular and Cellular Biology.....	25
19. Professional Conversation for Biologists III.....	29
20. Teaching Practice II - Biology.....	31
21. Teaching Practice III - Biology.....	33
22. Teaching Practice IV - Biology.....	35

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdm/ ANT2/15	Name: Anthropology II
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: Exam - 100%. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.	
Results of education: Students acquire basic knowledge of the main areas of anthropology - antroposociogenézy, molecular anthropology, ethnic anthropology and human ecology.	
Brief syllabus: Principles of palaeoanthropological methodology, basic characteristics, origin and evolution of primates, evidence of the human development from an animal ancestor, not ontological documents of antropogeneze. The basic characteristic of hominids, the hypothesis of hominids evolution, the oldest hominids - Australopithecus. Fossil representatives of the Homo genus (main characteristics and the incidence of H. habilis, H. ergaster, H. rudolfensis, H. erectus, H. heidelbergensis, H. antecessor, H. neanderthalensis, H. sapiens). Genetic variability in the human population and the origin of genetic polymorphisms. Utilization of human genetics in anthropology. Morphological variability of human - factors of classification, physical and ethnic characteristics of the population of each continent, racism. Basics of human ecology.	
Literature: BODZSÁR, É., ZSÁKAI, A.: Humánbiológia (Gyakorlati kézikönyv). Budapest, 2003. BODZSÁR, É.: Humánbiológia: Életkorok biológiája: A pubertáskor. - 1. vyd. - Budapest : ELTE Eötvös Kiadó, 2003. - 235s. - ISBN 963 463 616 0 GYENIS GY.: Humánbiológia: A hominidák evolúciója. - Budapest : Nemzeti Tankönyvkiadó, 2001. - 228. - ISBN 963 1921 11 5 Feneis, H.: Anatomický obrazový slovník. Stuttgart : Georg Thieme Verlag, 1993. - 455s. - ISBN 80 7169 197 6 Mader, S. S.: Human biology. Wm. C. Brown Publishers, USA, Third edition 1992. 500 s. - ISBN 0-697-12333-2 McCracken, T.O.: Háromdimenziós anatómiai atlasz. Budapest : Scolar Kiadó, 2000. - 237 s. - ISBN 978-963-9193-99-4 MUEHLENBEIN, M.P: Human Evolutionary Biology, Cambridge Un. Press, 2011 Nagy, M.: Humánbiológia, Lilium Aurum, Dunaszerdahely, 2006, ISBN 80-8062-283-3.	

<p>Netter, F. H.: Humán anatómiai atlasz. Budapest : Medicina Könyvkiadó, 2004. - 562 s. ISBN 963 242 848 X</p> <p>POSPÍŠIL, M.: Biológia človeka. Přírodovědecká fakulta UK Praha, 2001. - 286 s. - ISBN 80-223-1579-6</p> <p>Wulf, Ch.: Az antropológia rövid összefoglalása. - 1. vyd. - Budapest : Enciklopédia Kiadó, 2007. - 323s. - ISBN 963 9655 09 0.</p>					
<p>Language, knowledge of which is necessary to complete a course: Hungarian or Slovak</p>					
<p>Notes:</p>					
<p>Evaluation of subjects Total number of evaluated students: 133</p>					
A	B	C	D	E	FX
40.6	18.8	14.29	10.53	12.03	3.76
<p>Teacher: Dr. habil. PaedDr. Melinda Nagy, PhD.</p>					
<p>Date of last update: 27.06.2023</p>					
<p>Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.</p>					

INFORMATION SHEET

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

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

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

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

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

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

Hungarian or Slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 118

A	B	C	D	E	FX
79.66	10.17	4.24	4.24	1.69	0.0

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

Date of last update: 27.06.2023

Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.

INFORMATION SHEET

Name of the university: J. Selye University					
Name of the faculty: Faculty of Education					
Code: KBIO/Bdm/ DAC-B/15		Name: Diploma Thesis with Defense			
Types, range and methods of educational activities: Form of study: Recommended extent of course (in hours): Per week: For the study period: Methods of study: present					
Number of credits: 4					
Recommended semester/trimester of study:					
Level of study: II.					
Prerequisites:					
Conditions for passing the subject: Thesis defense, which is evaluated by the state exams. Final evaluation: A - 100 - 90% B - 89 - 80%, C - 79-70%, D - 69-60%, E - 59 - 50%. Credits are not awarded to student, who do not achieve 50%.					
Results of education: Student presents basic knowledge, habits and theoretical and practical skills required for work associated with the planning, research implementation in biology and publishing.					
Brief syllabus: Work submitted includes parts in accordance with the current directive of the Rector about the final thesis.					
Literature: Study literature mentioned in the assigned topic.					
Language, knowledge of which is necessary to complete a course: Hungarian or Slovak					
Notes:					
Evaluation of subjects Total number of evaluated students: 49					
A	B	C	D	E	FX
48.98	30.61	16.33	4.08	0.0	0.0
Teacher:					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					

INFORMATION SHEET

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

Štátny vzdelávací program (2011): Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej>
 Rámcový učebný plán pre základné školy s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7881/18675:2-921, Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2.alej>
 Rámcový učebný plán pre gymnáziá so štvorročným a osemročným štúdiom s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7915/18752:1-922. Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a.alej>
 Zákon NR SR 245/2008 Z.z. o výchove a vzdelávaní (školský zákon) a o zmene a doplnení niektorých zákonov v znení neskorších predpisov. Dostupný na: <https://www.minedu.sk/zakon-c-2452008-z-z-o-vychove-a-vzdelavani-skolsky-zakon-a-o-zmene-a-doplneni-niektorych-zakonov-v-zneni-neskorsich-predpisov/>

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

Hungarian or Slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 124

A	B	C	D	E	FX
59.68	17.74	16.94	4.84	0.81	0.0

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

Date of last update: 27.06.2023

Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.

INFORMATION SHEET

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

Evaluation of subjects					
Total number of evaluated students: 127					
A	B	C	D	E	FX
28.35	44.09	15.75	6.3	3.94	1.57
Teacher: RNDr. Eva Tóthová Tarová, PhD., Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD., Ing. Iveta Szencziiová, PhD.					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					

INFORMATION SHEET

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

Language, knowledge of which is necessary to complete a course: Hungarian or Slovak					
Notes:					
Evaluation of subjects Total number of evaluated students: 129					
A	B	C	D	E	FX
69.77	24.03	4.65	1.55	0.0	0.0
Teacher: Dr. habil. Sarolta Zsuzsanna Mészárosné Darvai, PhD.					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					

INFORMATION SHEET

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

Evaluation of subjects					
Total number of evaluated students: 176					
A	B	C	D	E	FX
31.82	30.11	17.05	12.5	8.52	0.0
Teacher:					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					

INFORMATION SHEET

Name of the university: J. Selye University					
Name of the faculty: Faculty of Education					
Code: KBIO/Bdm/ EVO/15		Name: Evolutionary Biology			
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: 1.					
Level of study: II.					
Prerequisites:					
Conditions for passing the subject: Written final test. Evaluation: A – 100-90%, B – 89-80%, C – 79-70%, D – 69-60%, E – 59-50%. Under 50% no credit will be given.					
Results of education: Based on examples from current scientific findings the student will understand the natural evolution processes					
Brief syllabus: Basic terms – ontogenesis, evolution. The hierarchic model of the ontogenesis. The evolutionary theories and the creationism. Darwin's theory of evolution, the Neo-Darwinism. Alternative theories of evolution. Ontogenesis and epigenesis Evolution and epigenesis. Ontogenesis and heterochromia.					
Literature: FLEGR, J.: Evoluční biologie, Academia, Praha, 2009. FORRÓ, L.: A Kárpát-medence állatvilágának kialakulása. Magyar Természettudományi Múzeum, Budapest, 2007. HAL, B.K.: Evolutionary Developmental Biology. Kluwer Academic Publishers, Dordrecht, 1999, 491 s. KOVÁČ, V.: Ontogenéza a evolúcia (učebný materiál - textová forma, CD ROM). 2003. MUEHLENBEIN, M.P: Human Evolutionary Biology, Cambridge Un. Press, 2011.					
Language, knowledge of which is necessary to complete a course: Hungarian or Slovak					
Notes:					
Evaluation of subjects Total number of evaluated students: 144					
A	B	C	D	E	FX
50.0	25.0	13.89	9.72	1.39	0.0

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

Date of last update: 27.06.2023

Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.

INFORMATION SHEET

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

<p>Sršeň, Š., Sršňová, K.: Základy klinickej genetiky. Martin : Vydavateľstvo Osveta, spol. s.r.o., 2005. - 450 s. ISBN 80 8063 185 9 Vodrážka, Z.: Biochemie. - 1. vyd. - Praha : Academia, 2007. - 190 s. - ISBN 978-80-200-0600-4. Watson, J.D.: DNS az élet titka. - 1. vyd. - Budapest : HVG Könyvek, 2004. - 450s. - ISBN 963 7525 564</p>					
<p>Language, knowledge of which is necessary to complete a course: Hungarian or Slovak</p>					
<p>Notes:</p>					
<p>Evaluation of subjects Total number of evaluated students: 134</p>					
A	B	C	D	E	FX
29.85	17.91	22.39	8.21	15.67	5.97
<p>Teacher: Dr. habil. PaedDr. Melinda Nagy, PhD.</p>					
<p>Date of last update: 27.06.2023</p>					
<p>Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.</p>					

INFORMATION SHEET

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

Vadász E., (1960Ú: Magyarország földtana. Akadémiai kiadó, Budapest. 646 s.					
Language, knowledge of which is necessary to complete a course: Hungarian or Slovak					
Notes:					
Evaluation of subjects Total number of evaluated students: 88					
A	B	C	D	E	FX
10.23	14.77	11.36	14.77	46.59	2.27
Teacher: Ing. Pavol Balázs, PhD., Dr. habil. PaedDr. Melinda Nagy, PhD.					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					

INFORMATION SHEET

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

Notes:					
Evaluation of subjects Total number of evaluated students: 133					
A	B	C	D	E	FX
11.28	9.02	11.28	14.29	47.37	6.77
Teacher: Ing. Pavol Balázs, PhD.					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					

INFORMATION SHEET

Name of the university: J. Selye University					
Name of the faculty: Faculty of Education					
Code: KBIO/Bdm/ GLO/15		Name: Global Problems of Environment			
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: 1.					
Level of study: II.					
Prerequisites:					
Conditions for passing the subject: 2 exams during the semester each 30 points. A minimum of 30 points must be acquired during the semester to get accepted to the final exam. Final exam 50 points. Evaluation: A – 100-90%, B – 89-80%, C – 79-70%, D – 69-60%, E – 59-50%.					
Results of education: After completing the course the student knows the important environmental issues of today.					
Brief syllabus: Pollution problems. Problems of hydrosphere. Problems of lithosphere and pedosphere. Preservation of Nature - species protection. Preservation of Nature - territorial protection. Problem of increasing human population. Environmental problems of human settlements. Risk factors. Environmental protection. International cooperation in environmental protection.					
Literature: Kerényi A.: Általános környezetvédelem. Mozaik Oktatási Stúdió, Szeged, 1995 Kerényi A.: Európa természet és környezetvédelme. Nemzeti Tankönyvkiadó, Budapest, 2003 Kerényi E., (1997): Környezetvédelem Környezetgazdálkodás Környezettudomány. Elpídia, Budapest, ISBN 9638533625. Klinda, J., 1999: Environmentalistika a právo I. MŽP SR, Bratislava, ISBN 80-88833-01-9 Klinda, J., 1998: Environmentalistika a právo II. MŽP SR, Bratislava, ISBN 80-88833-04-3 Zákony SR, v oblasti environmentalistiky Aktuálne správy o stave životného prostredia sa odporúčaná literatúra pre študenta k predmetu					
Language, knowledge of which is necessary to complete a course: Hungarian or Slovak					
Notes:					
Evaluation of subjects Total number of evaluated students: 82					
A	B	C	D	E	FX
26.83	28.05	17.07	14.63	13.41	0.0

Teacher:
Date of last update: 27.06.2023
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.

INFORMATION SHEET

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

Sutka, J.: Növényi citogenetika. - 1. vyd. - Budapest : Mezőgazda Kiadó, 2004. - 232 s. - ISBN 963 286 170 1.
SZEBERÉNYI, J.: Molekuláris sejtbiológia. Dialogus Campus Kiadó, 392 s., ISBN 978-963-9950-54-2
Venetianer, P.: A DNS szép világa. - Budapest : Kulturtrade Kft, 2001. - 190. - ISBN 9639069574.

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

Hungarian or Slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 128

A	B	C	D	E	FX
16.41	20.31	26.56	15.63	21.09	0.0

Teacher: Dr. habil. PaedDr. Melinda Nagy, PhD., RNDr. Eva Tóthová Tarová, PhD.

Date of last update: 27.06.2023

Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdm/ MIK/15	Name: Microbiology
Types, range and methods of educational activities: Form of study: Lecture / Practical Recommended extent of course (in hours): Per week: 1 / 1 For the study period: 13 / 13 Methods of study: present	
Number of credits: 4	
Recommended semester/trimester of study: 1.	
Level of study: II.	
Prerequisites:	
Conditions for passing the subject: Final Exam: 100 points maximum. Grading: A – 100 - 90%, B – 89 - 80%, C – 79 - 70%, D – 69 - 60%, E – 59 - 50%. 0–49 Failed/Unsatisfactor.	
Results of education: Microbiologists study microorganisms such as bacteria, viruses, algae, fungi, and some types of parasites. They try to understand how these organisms live, grow, and interact with their environments.	
Brief syllabus: Introduction to Microbiology. Microorganisms and the natural environment. Role of Microbes in Ecosystems. The Microbe: The Basics of Structure, Morphology, and Physiology as They Relate to Microbial Characterization and Attribution. Growth, metabolic partitioning, and the size of microorganisms. Microbial ecology. Classification of bacteria. Virus vs Prion. Techniques of Virus Cultivation. Fungal infections. Economic Uses and Benefits of Microorganisms. Laboratory procedure. Disinfection and Sterilization. Microbiology Laboratory Equipment. Good microbiological laboratory practice. Preparation of media and cultures. Cultivation of microorganisms. Staining of microorganisms. Methods for the Detection of Microorganisms. Antibiotic Effectiveness. Looking at the Structure of Cells in the Microscope	
Literature: ALFÖLDY, Z.: Orvosi mikrobiológia és immunitástan. 1. vyd. Budapest : Medicina, 1967. - 490 s. BETINA, V.: Mikrobiológia 1.,2. Bratislava : Slovenská Technická Univerzita, 1993, 472 p. ISBN 8022705764. HORÁKOVÁ, K. Mikrobiológia 2. Bratislava : Slovenská Technická Univerzita, 1993, 214 s. ISBN 802270525. SCHNEIDER, L.: Életünk és a mikrobák. 1. vyd. - Budapest : Móra Ferenc Könyvkiadó, 1974, 142 s. ISBN 963 11 0135 5. SZABÓ, I.: A bioszféra mikrobiológiája I. 1. vyd. - Budapest : Akadémiai Kiadó, 1992, 695 s. ISBN 963 05 6388 6.	
Language, knowledge of which is necessary to complete a course:	

hungarian, slovak language					
Notes:					
Evaluation of subjects					
Total number of evaluated students: 134					
A	B	C	D	E	FX
38.81	19.4	22.39	12.69	6.72	0.0
Teacher: RNDr. Eva Tóthová Tarová, PhD.					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					

INFORMATION SHEET

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

A	B	C	D	E	FX
46.43	16.07	12.5	14.29	10.71	0.0
Teacher:					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdm/ PX2-B/15	Name: Teaching Practice II - Biology
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: Students submit documentation concerning their teaching practice: completed observation sheets, records of teaching practice, preparation for lessons and evaluation of their ascent teaching practice.	
Results of education: Within the teaching practice students observe and analyze the educational process, learn to apply theoretical knowledge acquired during of study general subjects, general and specialized didactics, and gradually acquire teaching skills to conduct teaching profession.	
Brief syllabus: - 5 hours to listen: passive participation on the lesson of the coaching teacher during which the students observe the course of the lesson respectively. aspects of the educational process and recorde their experiences to the observation sheets; - 5 hours of preparation: student prepares according to the instructions and guidance of coaching teacher for active teaching activity, respectively. to lead teaching processe. - 5 hours of active teaching activity: student teach in the class selected by coaching teacher as a teacher and leads the lesson; - 5 hours of analysis and evaluation: coaching teacher and student collectively analyze the work of student from methodic and didactic points of view.	
Literature: Štátny pedagogický ústav (2009a): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 2. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej Štátny pedagogický ústav (2009b): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 3. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej Štátny vzdelávací program (2011): Dostupný na: http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej	

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

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

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

Hungarian or Slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 25

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

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

Date of last update: 27.06.2023

Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.

INFORMATION SHEET

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

<http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2.alej>
Rámcový učebný plán pre gymnáziá so štvorročným a osemročným štúdiom s vyučovacím jazykom slovenským a s vyučovacím jazykom národnostných menšín. Schválené pod číslom 2011-7915/18752:1-922. Dostupný na: <http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a.alej>

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

Hungarian or Slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 32

A	B	C	D	E	FX
87.5	12.5	0.0	0.0	0.0	0.0

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

Date of last update: 27.06.2023

Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Education	
Code: KBIO/Bdm/ PX4-B/15	Name: Teaching Practice IV - Biology
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: Students submit documentation concerning their teaching practice: completed observation sheets, records of teaching practice, preparation for lessons and evaluation of their ascent teaching practice.	
Results of education: Within the teaching practice students observe and analyze the educational process, learn to apply theoretical knowledge acquired during of study general subjects, general and specialized didactics, and gradually acquire teaching skills to conduct teaching profession.	
Brief syllabus: - 5 hours to listen: passive participation on the lesson of the coaching teacher during which the students observe the course of the lesson respectively. aspects of the educational process and record their experiences to the observation sheets; - 5 hours of preparation: student prepares according to the instructions and guidance of coaching teacher for active teaching activity, respectively. to lead teaching process. - 5 hours of active teaching activity: student teach in the class selected by coaching teacher as a teacher and leads the lesson; - 5 hours of analysis and evaluation: coaching teacher and student collectively analyze the work of student from methodic and didactic points of view.	
Literature: Štátny pedagogický ústav (2009a): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 2. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-2-stupen-zakladnych-skol-ISCED-2/Clovek-a-priroda.alej Štátny pedagogický ústav (2009b): Štátny vzdelávací program BIOLÓGIA. (Vzdelávacia oblasť: Človek a príroda), Príloha ISCED 3. Posúdila a schválila ÚPK pre biológiu pri ŠPÚ, Bratislava 2009, Dostupný na: http://www.statpedu.sk/sk/Statny-vzdelavaci-program/Statny-vzdelavaci-program-pre-gymnaziaISCED-3a/Clovek-a-priroda.alej Štátny vzdelávací program (2011): Dostupný na: http://www.statpedu.sk/sk/Statny-vzdelavaci-program.alej	

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

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

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

Hungarian or Slovak

Notes:

Evaluation of subjects

Total number of evaluated students: 63

A	B	C	D	E	FX
79.37	17.46	3.17	0.0	0.0	0.0

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

Date of last update: 27.06.2023

Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.

INFORMATION SHEET

Name of the university: J. Selye University					
Name of the faculty: Faculty of Education					
Code: KBIO/Bdm/SZS/15		Name: Biology and Methodology of Teaching Biology			
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: KBIO/Bdm/GEN2/15 and KBIO/Bdm/MIK/15 and KBIO/Bdm/ZPV/15 and KBIO/Bdm/ANT2/15 and KBIO/Bdm/GEO/15 and KBIO/Bdm/MBB/15 and KBIO/Bdm/TPP/15 and KBIO/Bdm/DIB/15 and KBIO/Bdm/EKL/15 and KBIO/Bdm/GEP/15 and KBIO/Bdm/PX4-B/15					
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 Biology (combined) masters the basic content of the disciplines of the specialization, the principles of its structure, is familiar with the methodology of producing the content of the specialization and its wider natural science and cultural and social contexts. The graduate is able to deal with this content as the product of human (scientific) activity and is able to design didactic intents and purposes in this context. In addition to managing teaching competences the graduate is able to participate in the development of methodological materials for teaching biology.					
Brief syllabus:					
Literature: Study literature listed in information sheet of compulsory courses.					
Language, knowledge of which is necessary to complete a course: Hungarian or Slovak					
Notes:					
Evaluation of subjects Total number of evaluated students: 79					
A	B	C	D	E	FX
17.72	22.78	16.46	27.85	13.92	1.27
Teacher:					
Date of last update: 27.06.2023					

Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.

INFORMATION SHEET

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

Evaluation of subjects					
Total number of evaluated students: 136					
A	B	C	D	E	FX
72.06	15.44	8.09	1.47	0.74	2.21
Teacher: Ing. Iveta Szencziová, PhD.					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					

INFORMATION SHEET

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

Language, knowledge of which is necessary to complete a course: hungarian, slovak					
Notes:					
Evaluation of subjects Total number of evaluated students: 136					
A	B	C	D	E	FX
27.21	25.74	20.59	12.5	13.24	0.74
Teacher: Ing. Pavol Balázs, PhD.					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					

INFORMATION SHEET

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

Evaluation of subjects					
Total number of evaluated students: 25					
A	B	C	D	E	FX
96.0	0.0	4.0	0.0	0.0	0.0
Teacher: Dr. habil. Sarolta Zsuzsanna Mészárosné Darvay, PhD.					
Date of last update: 27.06.2023					
Approved by: Dr. habil. Anna Tóthné Litovkina, PhD., prof. Dr. Béla István Pukánszky, DSc.					