

Course descriptions

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COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-412/22			Course title: Abstract of a contribution from a domestic or an international conference (originally AFG, AFK, AFH, AFL)				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 4							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 611							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/N-DPEF-003/22	Course title: Application of Physical, Chemical and Microbiological Methods in Soil Science
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information Form of education: lectures Recommended range of teaching (in hours):26 Weekly: 2 hrs For the period of study:13 weeks Form of study:combined	
Number of credits: 3	
Recommended semester: 1.	
Educational level: III.	
Prerequisites:	
Course requirements: The final evaluation will be made on the basis of an oral exam. The final evaluation will be completed if the student gives a minimum performance corresponding to 60% of the maximum performance (with manifestations of original thinking, with the ability to analyze, synthesize and interpret). The final evaluation will not be passed if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance, which indicates a lack of knowledge and misunderstanding of the basic components of the course.	
Learning outcomes: The course builds on the previous knowledge of students and expands these with special methods used in soil research. The course is focused not only on explaining the principles of individual methods, but great emphasis is placed on various ways of evaluation and interpretation of the obtained results. Upon successful completion of this course, students will be able to use the most modern methods in their own research, will know the possibilities of their use and will be able to use the results for synthesis and interpretation in a comprehensive assessment of processes affecting soils and the environment.	
Class syllabus: 1. Introduction to special soil analyzes. 2. Characteristics of soil pore environment. 3. Methods of determination and modeling of water-conducting properties of soil. 4. Determination and modeling of saturated and unsaturated hydraulic conductivity of soils. 5. Analysis of structural properties of soil and stability of soil aggregates. 6. Analysis and modeling of precipitation and dissolution equilibria in soils. 7. Determination and significance of variable charge of soil colloids. 8. Methods of determination and significance of specific sorption in soils. 9. Use of methods of instrumental chemical analysis in solid phase research. 10. Bioindication methods for determining the degree	

of influence of changes in anthropogenic and ecological characteristics on the composition of soil microbiocenosis. 11. Methods for determination of carbon content in microbial soil biomass. 12. Polymerase Chain Reaction (PCR) and the use of specific properties of nucleic acids, in determining the species of microorganisms in the soil.

Recommended literature:

Klute, A. (Ed.), 1986: Methods of Soil Analysis 1: Physical and Mineralogical Methods, 2nd Ed., American Society of Agronomy, Madison

Sparks, D.L. (Ed.), 1996: Methods of Soil Analysis. Part 3. Chemical Methods. Soil Science Society of America, Madison

van Elsas, J.D., Jansson, J.K., Trevors, J.T., 2006. Modern Soil Microbiology, CRC Press, 672 s.

Languages necessary to complete the course:

Slovak and English (the literature in English)

Notes:

Past grade distribution

Total number of evaluated students: 2

ABS	NEABS
100,0	0,0

Lecturers: prof. RNDr. Alexandra Šimonovičová, CSc., prof. RNDr. Pavel Dlapa, PhD., doc. Mgr. Ivan Šimkovic, PhD.

Last change: 28.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-505/22				Course title: Bachelor's thesis reviewer			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 3							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 274							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-504/22				Course title: Bachelor's thesis supervisor			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 8							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 86							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-414/22				Course title: Completing an long-term ERASMUS+ internship (minimum 60 days)			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 20							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 32							
A	ABS	B	C	D	E	FX	NEABS
0,0	96,88	0,0	0,0	0,0	0,0	0,0	3,13
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-415/22			Course title: Completion of SAIA/NŠP internship program or other equivalent (minimum 30 days)				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 20							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 30							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-416/22			Course title: Completion of a short-term foreign internship (15-30 days, and related to the topic of the PhD thesis)				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 7							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 62							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/PriF-DSSZ-001/22	Course title: Dissertation 1
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Number of credits: 5	
Recommended semester: 1.	
Educational level: III.	
Prerequisites:	
Course requirements: The evaluation of the subject takes place individually according to the student's study plan. The final evaluation will be completed if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will not be passed if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance.	
Learning outcomes: The student acquires a sufficient orientation in the issues of the dissertation in accordance with the specifics of individual topics. This knowledge is important for the graduate's theoretical abilities, but also supports the development of his potential in a wide range of applied practice. Undoubtedly, the results of education will also be reflected in the student's overview at the level of methodological approaches in the given issue.	
Class syllabus:	
Recommended literature: No specification due to the nature of the specific topic of the dissertation. The recommended literature is a part of the student's study plan.	
Languages necessary to complete the course: Slovak and English (the literature in English)	
Notes:	
Past grade distribution Total number of evaluated students: 2	
ABS	NEABS
100,0	0,0
Lecturers: doc. Mgr. Ivan Šimkovic, PhD.	
Last change: 28.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/PriF-DSSZ-002/22	Course title: Dissertation 2
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information No specification with regard to the doctoral degree (choice of methods - full-time, distance, combined).	
Number of credits: 5	
Recommended semester: 2.	
Educational level: III.	
Prerequisites:	
Course requirements: The evaluation of the subject takes place individually according to the student's study plan. The final evaluation will be completed if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will not be passed if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance.	
Learning outcomes: The student acquires a sufficient orientation in the issues of the dissertation in accordance with the specifics of individual topics. This knowledge is important for the graduate's theoretical abilities, but also supports the development of his potential in a wide range of applied practice. Undoubtedly, the results of education will also be reflected in the student's overview at the level of methodological approaches in the given issue.	
Class syllabus: The subject Dissertation is a compulsory part of the doctoral student's study activities. It acquires a supremely individual character with regard to the specifics of individual topics of the dissertation. Its basic syllabus is already evident within the individual study plan of the doctoral student. The subject is important especially in terms of understanding the basic theoretical and methodological aspects of the topic of the dissertation with emphasis on self-study and consultation with the supervisor and a wide range of consultants. He participates in creating the professional potential of a doctoral student in the next (scientific) stage of his studies.	
Recommended literature: No specification due to the nature of the specific topic of the dissertation. The recommended literature is a part of the student's study plan.	
Languages necessary to complete the course: Slovak and English (the literature in English)	

Notes:	
Past grade distribution	
Total number of evaluated students: 2	
ABS	NEABS
100,0	0,0
Lecturers: prof. RNDr. Alexandra Šimonovičová, CSc.	
Last change: 28.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/PriF-DSSZ-003/22	Course title: Dissertation 3
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information No specification with regard to the doctoral degree (choice of methods - full-time, distance, combined).	
Number of credits: 5	
Recommended semester: 3.	
Educational level: III.	
Prerequisites:	
Course requirements: The evaluation of the subject takes place individually according to the student's study plan. The final evaluation will be completed if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will not be passed if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The structure and content of the course in case of distant form will be the same, but it will be presented by distant way.	
Learning outcomes: The student acquires a sufficient orientation in the issues of the dissertation in accordance with the specifics of individual topics. This knowledge is important for the graduate's theoretical abilities, but also supports the development of his potential in a wide range of applied practice. Undoubtedly, the results of education will also be reflected in the student's overview at the level of methodological approaches in the given issue.	
Class syllabus: The subject Dissertation is a compulsory part of the doctoral student's study activities. It acquires a supremely individual character with regard to the specifics of individual topics of the dissertation. Its basic syllabus is already evident within the individual study plan of the doctoral student. The subject is important especially in terms of understanding the basic theoretical and methodological aspects of the topic of the dissertation with emphasis on self-study and consultation with the supervisor and a wide range of consultants. He participates in creating the professional potential of a doctoral student in the next (scientific) stage of his studies.	
Recommended literature: No specification due to the nature of the specific topic of the dissertation. The recommended literature is a part of the student's study plan.	
Languages necessary to complete the course:	

Slovak and English (the literature in English)	
Notes:	
Past grade distribution	
Total number of evaluated students: 2	
ABS	NEABS
100,0	0,0
Lecturers: doc. RNDr. Ľudmila Slováková, CSc.	
Last change: 07.11.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/PriF-DSSZ-004/22	Course title: Dissertation 4
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information No specification with regard to the doctoral degree (choice of methods - full-time, distance, combined).	
Number of credits: 5	
Recommended semester: 4.	
Educational level: III.	
Prerequisites:	
Course requirements: The evaluation of the subject takes place individually according to the student's study plan. The final evaluation will be completed if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will not be passed if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance.	
Learning outcomes: The student acquires a sufficient orientation in the issues of the dissertation in accordance with the specifics of individual topics. This knowledge is important for the graduate's theoretical abilities, but also supports the development of his potential in a wide range of applied practice. Undoubtedly, the results of education will also be reflected in the student's overview at the level of methodological approaches in the given issue.	
Class syllabus: The subject Dissertation is a compulsory part of the doctoral student's study activities. It acquires a supremely individual character with regard to the specifics of individual topics of the dissertation. Its basic syllabus is already evident within the individual study plan of the doctoral student. The subject is important especially in terms of understanding the basic theoretical and methodological aspects of the topic of the dissertation with emphasis on self-study and consultation with the supervisor and a wide range of consultants. He participates in creating the professional potential of a doctoral student in the next (scientific) stage of his studies.	
Recommended literature: No specification due to the nature of the specific topic of the dissertation. The recommended literature is a part of the student's study plan.	
Languages necessary to complete the course: Slovak and English (the literature in English)	

Notes:	
Past grade distribution	
Total number of evaluated students: 3	
ABS	NEABS
100,0	0,0
Lecturers:	
Last change: 28.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/PriF-DSSZ-005/22	Course title: Dissertation 5
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information No specification with regard to the doctoral degree (choice of methods - full-time, distance, combined).	
Number of credits: 5	
Recommended semester: 5.	
Educational level: III.	
Prerequisites:	
Course requirements: The evaluation of the subject takes place individually according to the student's study plan. The final evaluation will be completed if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will not be passed if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance.	
Learning outcomes: The student acquires a sufficient orientation in the issues of the dissertation in accordance with the specifics of individual topics. This knowledge is important for the graduate's theoretical abilities, but also supports the development of his potential in a wide range of applied practice. Undoubtedly, the results of education will also be reflected in the student's overview at the level of methodological approaches in the given issue.	
Class syllabus: The subject Dissertation is a compulsory part of the doctoral student's study activities. It acquires a supremely individual character with regard to the specifics of individual topics of the dissertation. Its basic syllabus is already evident within the individual study plan of the doctoral student. The subject is important especially in terms of understanding the basic theoretical and methodological aspects of the topic of the dissertation with emphasis on self-study and consultation with the supervisor and a wide range of consultants. He participates in creating the professional potential of a doctoral student in the next (scientific) stage of his studies.	
Recommended literature: No specification due to the nature of the specific topic of the dissertation. The recommended literature is a part of the student's study plan.	
Languages necessary to complete the course: Slovak and English (the literature in English)	

Notes:	
Past grade distribution	
Total number of evaluated students: 1	
ABS	NEABS
100,0	0,0
Lecturers:	
Last change: 28.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/PriF-DSSZ-006/22	Course title: Dissertation 6
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information No specification with regard to the doctoral degree (choice of methods - full-time, distance, combined).	
Number of credits: 5	
Recommended semester: 6.	
Educational level: III.	
Prerequisites:	
Course requirements: The evaluation of the subject takes place individually according to the student's study plan. The final evaluation will be completed if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will not be passed if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance.	
Learning outcomes: The student acquires a sufficient orientation in the issues of the dissertation in accordance with the specifics of individual topics. This knowledge is important for the graduate's theoretical abilities, but also supports the development of his potential in a wide range of applied practice. Undoubtedly, the results of education will also be reflected in the student's overview at the level of methodological approaches in the given issue.	
Class syllabus: The subject Dissertation is a compulsory part of the doctoral student's study activities. It acquires a supremely individual character with regard to the specifics of individual topics of the dissertation. Its basic syllabus is already evident within the individual study plan of the doctoral student. The subject is important especially in terms of understanding the basic theoretical and methodological aspects of the topic of the dissertation with emphasis on self-study and consultation with the supervisor and a wide range of consultants. He participates in creating the professional potential of a doctoral student in the next (scientific) stage of his studies.	
Recommended literature: No specification due to the nature of the specific topic of the dissertation. The recommended literature is a part of the student's study plan.	
Languages necessary to complete the course: Slovak and English (the literature in English)	

Notes:	
Past grade distribution	
Total number of evaluated students: 1	
ABS	NEABS
100,0	0,0
Lecturers:	
Last change: 28.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/PriF-DSSZ-007/22	Course title: Dissertation 7
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information No specification with regard to the doctoral degree (choice of methods - full-time, distance, combined).	
Number of credits: 5	
Recommended semester: 7.	
Educational level: III.	
Prerequisites:	
Course requirements: The evaluation of the subject takes place individually according to the student's study plan. The final evaluation will be completed if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will not be passed if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance.	
Learning outcomes: The student acquires a sufficient orientation in the issues of the dissertation in accordance with the specifics of individual topics. This knowledge is important for the graduate's theoretical abilities, but also supports the development of his potential in a wide range of applied practice. Undoubtedly, the results of education will also be reflected in the student's overview at the level of methodological approaches in the given issue.	
Class syllabus: The subject Dissertation is a compulsory part of the doctoral student's study activities. It acquires a supremely individual character with regard to the specifics of individual topics of the dissertation. Its basic syllabus is already evident within the individual study plan of the doctoral student. The subject is important especially in terms of understanding the basic theoretical and methodological aspects of the topic of the dissertation with emphasis on self-study and consultation with the supervisor and a wide range of consultants. He participates in creating the professional potential of a doctoral student in the next (scientific) stage of his studies.	
Recommended literature: No specification due to the nature of the specific topic of the dissertation. The recommended literature is a part of the student's study plan.	
Languages necessary to complete the course: Slovak and English (the literature in English)	

Notes:	
Past grade distribution	
Total number of evaluated students: 3	
ABS	NEABS
100,0	0,0
Lecturers:	
Last change: 28.09.2022	
Approved by:	

STATE EXAM DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/N-DEPD-400/22	Course title: Dissertation exam
Number of credits: 15	
Educational level: III.	
Recommended prerequisites: Compulsory and other compulsory optional subjects according to the accreditation and the individual study plan of the doctoral student.	
Course requirements: The evaluation takes place within the state examination in accordance with the Study Regulations of the FNS CU in Bratislava and after the submission of the written work for the dissertation examination within the set deadline. The subjects of the state examination include a discussion of the written work for the dissertation examination (prepared by the doctoral student) and other subjects of the oral examination approved by the dean. The assessment is standard and reflects the sufficient orientation of the student in the issue. The conditions for successful completion of the course are in accordance with the Study Regulations of the FNS CU.	
Learning outcomes: The aim is to acquire basic skills and cultural-ethical aspects of working with scientific literature, evaluation and systematization of studied knowledge. The doctoral student must successfully pass the dissertation examination according to the Act on Higher Education Institutions and the Study Regulations of the FNS CU.	
Class syllabus: Based on the description of the starting points, principles and conclusions from the published results of the studied issues, the doctoral student should prepare a critical review. Another goal is to understand the principles of scientific work and its attributes of ethical legal, philosophical and social. The main output is the elaboration of a written work for the dissertation exam. The dissertation examination consists of a part consisting of a discussion of the written work for the dissertation examination and a part in which the doctoral student has to demonstrate theoretical knowledge in accordance with the focus of his work. The composition of the examination committee, the appointment of the opponent and the course of the dissertation exam are governed by the current Study Regulations of the FNS CU.	
State exam syllabus:	
Recommended literature: No specification due to the nature of the specific topic of the dissertation. The recommended literature is a part of the student's study plan.	
Languages necessary to complete the course: Slovak and English (the literature in English)	
Last change: 28.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/N-DPEF-005/22	Course title: Environmental Functions and Properties of Soils
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information Form of education: lectures Recommended range of teaching (in hours): 26 Weekly: 2 hrs For the period of study: 13 weeks Form of study: combined	
Number of credits: 3	
Recommended semester: 3.	
Educational level: III.	
Prerequisites:	
Course requirements: The final evaluation will be made on the basis of an oral exam. The final evaluation will be completed if the student gives a minimum performance corresponding to 60% of the maximum performance (with manifestations of original thinking, with the ability to analyze, synthesize and interpret). The final evaluation will not be passed if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance, which indicates a lack of knowledge and misunderstanding of the basic components of the course.	
Learning outcomes: The course builds on previous knowledge of students, expands this to the issue of non-productive functions of soils. The course defines the environmental properties of soils and introduces students to the environmental functions of soils. Upon successful completion of this course, students will be able to evaluate and interpret not only partial soil properties obtained using standard methods of soil research, but also emphasis will be placed on the synthesis of existing knowledge in the form of a more comprehensive assessment of environmental functions of soils.	
Class syllabus: 1. Introduction to special soil analyzes. 2. Characteristics of soil pore environment. 3. Methods of determination and modeling of water-conducting properties of soil. 4. Determination and modeling of saturated and unsaturated hydraulic conductivity of soils. 5. Analysis of structural properties of soil and stability of soil aggregates. 6. Analysis and modeling of precipitation and dissolution equilibria in soils. 7. Determination and significance of variable charge of soil colloids. 8. Methods of determination and significance of specific sorption in soils. 9. Use of methods of instrumental chemical analysis in solid phase research. 10. Bioindication methods for determining the degree of influence of changes in anthropogenic and ecological characteristics on the composition of soil microbiocenosis. 11. Methods for determination of carbon content in microbial soil biomass. 12.	

Polymerase Chain Reaction (PCR) and the use of specific properties of nucleic acids, in determining the species of microorganisms in the soil.	
Recommended literature: Bedrna Z. 2002: Environmentálne pôdoznalectvo. Veda, Bratislava, 352 s. Hillel D., 1998: Environmental Soil Physics. Fundamentals, Applications, and Environmental Considerations. Imprint: Academic Press, 771 p. McBride M.B., 1994: Environmental chemistry of soils. Oxford University Press, INew York, 406 p.	
Languages necessary to complete the course: Slovak and English (the literature in English)	
Notes:	
Past grade distribution Total number of evaluated students: 2	
ABS	NEABS
100,0	0,0
Lecturers: doc. Mgr. Ivan Šimkovic, PhD., prof. RNDr. Pavel Dlapa, PhD.	
Last change: 28.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-400/22				Course title: Grant CU or Grant SAS or equivalent grant			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 12							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 174							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-413/22				Course title: Intellectual Property Rights Document (originally AGJ)			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 10							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 0							
A	ABS	B	C	D	E	FX	NEABS
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

STATE EXAM DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/PriF-DSSZ-302/22	Course title: Oral defence of dissertation thesis
Number of credits: 30	
Educational level: III.	
Course requirements: Conditions for passing the course: Course evaluation takes place as a part of the State examination in accordance to the Study regulations of the Faculty of Natural Sciences UK in Bratislava upon submission of the written part of the dissertation thesis (as final work). Assessment is standard and reflects the student's sufficient orientation in the issue. The conditions for successful course completion are in accordance with the Study Regulations of the Faculty of Natural Sciences UK.	
Learning outcomes: Educational outcomes: The aim of the course is to capitalise on theoretical, methodological and applied knowledge of doctoral studies in the elaboration and subsequent defence of the dissertation thesis, and thus the successful completion of doctoral studies.	
Class syllabus: Brief outline of the course: The student's dissertation thesis will demonstrate his/her ability and readiness for independent scientific and cre	
State exam syllabus:	
Recommended literature: Recommended literature: No specifications regarding the character of a specific topic for the dissertation thesis. Recommended literature is included in the doctoral student's individual study plan.	
Languages necessary to complete the course: Required language for successful course completion: Slovak language in combination with English (study literature in English)	
Last change: 24.10.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-508/22				Course title: Other activities			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 1							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 475							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-501/22				Course title: P1 Pedagogical output as a whole (originally ACA, ACB, BCI, BCB)			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 20							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 8							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-503/22				Course title: P2 Pedagogical output as a part (originally BCK)			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 10							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 0							
A	ABS	B	C	D	E	FX	NEABS
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-502/22			Course title: P2 Pedagogical output as part (originally ACC, ACD)				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 15							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 0							
A	ABS	B	C	D	E	FX	NEABS
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-507/22			Course title: Pedagogical activity (4 hours/WS and 4 hours/SS) or alternative pedagogical work				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 2							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 497							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/N-DPEF-004/22	Course title: Phytoindication of Changes in Soil Ecosystems
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information Form of education:lectures Recommended range of teaching (in hours):26 Weekly: 2 hrs For the period of study:13 weeks Form of study:combined	
Number of credits: 3	
Recommended semester: 2.	
Educational level: III.	
Prerequisites:	
Course requirements: Successful completion of the course is conditioned by passing an oral exam on a selected issue at least 60%. Credits will not be awarded to a student who receives less than 60%. The structure and content of the course in case of distant form will be the same, but it will be presented by distant way.	
Learning outcomes: Thecourse should provide an extended knowledge about changes in soil ecosystems that mostly appear on the plant level. These knowledges exceed those that are offered to students in the master's degree. The aim of the course is also to prepare students for their dissertation state exams. Obtained knowledge should be later used by students during preparation of their dissertation theses and after the successful graduation in future scientific research.	
Class syllabus: The course is apart of educational part of Individual education programof each PhD.student. It focuses on actual findings and recent knowledge how to evaluatemodified edaphic factors that greatly affect plants, especially changes in soil abiotic and biotic factors that considerably influence plant growth and development. The course also providesa training in specific methods of ecophysiological research in the laboratory experiments.	
Recommended literature: Keddy P. 2017. Plant Ecology: Origins, Processes, Consequences. 2ndEd. Cambridge University Press, 624 pp. Shukla V, Kumar V, Kumar N. 2017. Plant Adaptation Strategies in Changing Environment. Springer Singapore, 427 pp.	

Taiz, L., Zeiger, E. 2011. Plant Physiology, 5International Edition, Sinauer Associates, Inc., 782 pp.	
Languages necessary to complete the course: Slovak and English (the literature in English)	
Notes:	
Past grade distribution Total number of evaluated students: 2	
ABS	NEABS
100,0	0,0
Lecturers: doc. RNDr. Marek Vaculík, PhD., doc. RNDr. Ľudmila Slováková, CSc., doc. Mgr. Boris Bokor, PhD.	
Last change: 07.11.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KJ/N-DSSZ-026/22	Course title: Professional English 1
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Number of credits: 5	
Recommended semester: 1., 3.	
Educational level: III.	
Prerequisites:	
Course requirements: Each course participant is required to achieve proficient knowledge and usage of the English grammar, professional vocabulary, reading and listening comprehension, writing professional texts and oral presentations. Credits will be awarded to students who will demonstrate active participation and deliver all set tasks and assignments successfully. The course participants will be awarded a pass or a fail upon course completion.	
Learning outcomes: Upon completion of the course, PhD students will effectively use the English language for professional purposes. They will proficiently comprehend targeted written and audio texts and present their viewpoints in required forms.	
Class syllabus: Theoretical and practical skills in professional written communication include appropriate structure of formal written texts (emails, application forms, personal statements, cover letters, abstracts, scientific articles, paraphrasing, using citations, citing sources, etc.) The course also focuses on theoretical explanation of correct delivery of oral texts, professional presentations and discussions. The course primary target is to facilitate PhD students with proficient usage of all the aspects of written and oral communication in various settings.	
Recommended literature: Armer, T.: Cambridge English for Scientists CD ROM Writing Professional English Team of authors: Test your Listening Skills: A Handbook for Science Doctoral students Team of authors: Test your Reading Skills: A Handbook for Science Doctoral students	
Languages necessary to complete the course: English	
Notes:	

Past grade distribution							
Total number of evaluated students: 180							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers: Mgr. Aneta Barnes, RNDr. Tatiana Slov�kov�, PhD.							
Last change: 03.10.2022							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KJ/N-DSSZ-027/22	Course title: Professional English 2
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Number of credits: 5	
Recommended semester: 2.	
Educational level: III.	
Prerequisites:	
Course requirements: Each course participant is required to achieve proficient knowledge and usage of the English grammar, professional vocabulary, reading and listening comprehension, writing professional texts and oral presentations. Credits will be awarded to students who will demonstrate active participation during seminars and deliver all prior set tasks and assignments successfully. The course participants will be awarded a pass or a fail upon course completion	
Learning outcomes: Doctoral students who successfully pass the examination in Professional English 2 will be enabled to use the English language for specific purposes in all its forms effectively and sufficiently. They will thoroughly comprehend professional texts in written and/or audio form, acquire professional vocabulary and actively participate in various oral communication settings.	
Class syllabus: Theoretical and practical skills in professional writing communication in the English language as a follow up to prior gained knowledge in the previous semester encompass writing professional résumés, summaries, lay summaries, responses to job interview questions, professional CVs, comparing and contrasting in scientific articles, etc. Professional oral communication focusses on research-based scientific presentations and effectively led discussions.	
Recommended literature: Armer, T.: Cambridge English for Scientists CD ROM Writing Professional English Team of authors: Test your Listening Skills: A Handbook for Science Doctoral students Team of authors: Test your Reading Skills: A Handbook for Science Doctoral students	
Languages necessary to complete the course: English	
Notes: B1 level in English is required in order to pass this course. Seminars are held in summer semester. Number of students in one course is limited to twenty.	

Students can choose from four offered time slots.	
Past grade distribution	
Total number of evaluated students: 88	
ABS	NEABS
100,0	0,0
Lecturers: Mgr. Aneta Barnes	
Last change: 03.10.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF.KDPP/N-DSSZ-500/22				Course title: Selected topics from university pedagogy for non-teachers			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 3							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 12							
A	ABS	B	C	D	E	FX	NEABS
0,0	91,67	0,0	0,0	0,0	0,0	0,0	8,33
Lecturers: RNDr. Jana Ciceková, PhD., doc. RNDr. PaedDr. Zuzana Haláková, PhD., PhDr. ThLic. Peter Ikhardt, PhD.							
Last change: 30.09.2022							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KJ/N-DSSZ-022/22	Course title: Slovak for Foreign Doctoral Students 1
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Number of credits: 3	
Recommended semester:	
Educational level: III.	
Prerequisites:	
Course requirements: The objective of the course is to acquire the basics of Slovak in a communicative way, to develop individual language skills (listening, reading, writing and speaking) based on the Common European Framework of Reference for Languages (CEFR) for the level A1, from a complete beginner level. Based on the completion of the course, the participants are able to understand and react to common situations. They are able to speak about themselves, ask for more information they need to know. Scale of assessment (preliminary/final): Credits will not be awarded to students who receive less than 60% on the final examination.	
Learning outcomes: The objective of the course is to acquire the basics of Slovak in a communicative way, to develop individual language skills (listening, reading, writing and speaking) based on the Common European Framework of Reference for Languages (CEFR) for the level A1, from a complete beginner level. Based on the completion of the course, the participants are able to understand and react to common situations. They are able to speak about themselves, ask for more information they need to know.	
Class syllabus: Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A1 (Lekcia: 1-5). UK v Bratislave, 2012. Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A1+A2, cvičebnica Audio program: https://uniba.sk/krizom-krazom Worksheets, website: https://slovake.eu/sk	
Recommended literature: Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A1 (Lekcia: 1-5). UK v Bratislave, 2012. Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A1+A2, cvičebnica Audio program: https://uniba.sk/krizom-krazom Worksheets, website: https://slovake.eu/sk	

Languages necessary to complete the course: Slovak in combination with English (the study literature is in both Slovak and English)							
Notes: It is possible to register for the course just once. Students may begin in either the Summer or Winter semester.							
Past grade distribution Total number of evaluated students: 41							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers: Mgr. Karin Rózsová Wolfová							
Last change: 28.09.2022							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KJ/N-DSSZ-023/22	Course title: Slovak for Foreign Doctoral Students 2
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Number of credits: 2	
Recommended semester:	
Educational level: III.	
Prerequisites:	
Course requirements: Type, extent and method of academic activities: 2 hours (at 60 min. per hour) of weekly lessons in the form of seminars. All academic activities will take place during the lessons. Number of credits: 3 credits Recommended semester/trimester of study: from 1st to 8th semester Level of study: third Subject conditions: Slovak for Foreign Doctoral Students 1 Requirements for course completion: active participation during lessons, ongoing work on the assignments. There will be a final examination at the end of the semester. Scale of assessment (preliminary/final): Credits will not be awarded to students who receive less than 60% on the final examination.	
Learning outcomes: Course Objectives: The objective of the course is to acquire the basics of Slovak in a communicative way, to develop individual language skills (listening, reading, writing and speaking) based on the Common European Framework of Reference for Languages (CEFR) for the level A1 - intended for beginner or pre-intermediate.	
Class syllabus: The lessons contain the basics of Slovak grammar which are relevant to the specifics of Slovak as a foreign language. Selected grammatical phenomena, conjugation and declination are practised. Vocabulary is focused on real-life communication needs.	
Recommended literature: Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A1 Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A1+A2, workbook Audio program: https://uniba.sk/krizom-krazom Worksheets are prepared by the course instructor. Portal: https://slovake.eu/sk	
Languages necessary to complete the course: Slovak in combination with English (the study literature is in both Slovak and English)	

Notes:

It is possible to register for the course just once. Students may begin in either the Summer or Winter semester.

Past grade distribution

Total number of evaluated students: 28

A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Karin Rózsová Wolfová

Last change: 18.07.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KJ/N-DSSZ-024/22	Course title: Slovak for Foreign Doctoral Students 3
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Number of credits: 2	
Recommended semester:	
Educational level: III.	
Prerequisites:	
Course requirements: Type, extent and method of academic activities: 2 hours (at 60 min. per hour) of weekly lessons in the form of seminars. All academic activities will take place during the lessons. Number of credits: 3 credits Recommended semester/trimester of study: from 1st to 8th semester Level of study: third Subject conditions: Slovak for Foreign Doctoral Students 2 Requirements for course completion: active participation during lessons, ongoing work on the assignments. There will be a final examination at the end of the semester. Scale of assessment (preliminary/final): Credits will not be awarded to students who receive less than 60% on the final examination.	
Learning outcomes: The objective of the course is to acquire the basics of Slovak in a communicative way, to develop individual language skills (listening, reading, writing and speaking) based on the Common European Framework of Reference for Languages (CEFR) for the levels A1 – A2. Intended for levels A1-A2, beginner to pre-intermediate	
Class syllabus: The lessons contain the basics of Slovak grammar which are relevant to the specifics of Slovak as a foreign language. Selected grammatical phenomena, conjugation and declination are practised. Vocabulary is focused on real-life communication needs.	
Recommended literature: Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A1, A2 Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A1+A2, workbook Audio program: https://uniba.sk/krizom-krazom Worksheets are prepared by the course instructor. Portal: https://slovake.eu/sk	
Languages necessary to complete the course: Slovak in combination with English (the study literature is in both Slovak and English)	

Notes:

It is possible to register for the course just once. Students may begin in either the Summer or Winter semester.

Past grade distribution

Total number of evaluated students: 27

A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: Mgr. Karin Rózsová Wolfová

Last change: 18.07.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KJ/N-DSSZ-028/22	Course title: Slovak for Foreign Doctoral Students 4
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Number of credits: 2	
Recommended semester:	
Educational level: III.	
Prerequisites:	
Course requirements: Grading (Assessment/Evaluation): Active participation during lessons, ongoing work on the assignments. There will be a final examination at the end of the semester. Credits will be awarded to students who receive more than 60% on the final examination. The course participants will be awarded a pass or a fail upon course completion.	
Learning outcomes: Objectives and outcomes: The objective of the course is to acquire the basics of Slovak in a communicative way, to develop individual language skills (listening, reading, writing and speaking) based on the Common European Framework of Reference for Languages (CEFR) for the levels A1 – A2, pre-intermediate level. Based on the completion of the course, the participants are able to understand the common situations and they are able to have a discussion and comment basic daily scenarios.	
Class syllabus: Brief outline of the course: The lessons contain the basics of Slovak grammar which are relevant to the specifics of Slovak as a foreign language. Selected grammatical aspects (verb - conjugation/next conjugation classes, possessive pronouns, I like/enjoy doing something, I like something, comparison of adjectives and adverbs, conditional) are practised. Vocabulary is focused on real-life communication needs.	
Recommended literature: Recommended literature: Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A1. UK v Bratislave, 2012. Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A2. (Lekcia 1-4). UK v Bratislave, 2012. Kamenárová, R. a kol.: Krížom-krážom, Slovenčina A1+A2, cvičebnica Audio program: https://uniba.sk/krizom-krazom Worksheets, website: https://slovake.eu/sk	
Languages necessary to complete the course:	

Language of instruction: Slovak in combination with English (the study literature is in Slovak).							
Notes:							
Past grade distribution Total number of evaluated students: 11							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers: Mgr. Karin Rózsová Wolfová							
Last change: 18.10.2022							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/N-DPEF-002/22	Course title: Soil Ecophysiology
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information Form of education: lectures Recommended range of teaching (in hours):52 Weekly: 4 hrs For the period of study:13 weeks Form of study:combined	
Number of credits: 5	
Recommended semester: 2.	
Educational level: III.	
Prerequisites:	
Course requirements: Successful completion of the course is conditioned by passing an oral exam on a selected issue at least 60%. Credits will not be awarded to a student who receives less than 60%. The structure and content of the course in case of distant form will be the same, but it will be presented by distant way.	
Learning outcomes: The course should provide an extended and updated knowledge about specific areas of soil ecophysiology. These knowledges exceed those that are offered to students in the master's degree. The aim of the course is also to prepare students for their dissertation state exams. Obtained knowledge should be later used by students during preparation of their dissertation theses and after the successful graduation in future scientific research.	
Class syllabus: The course is apart of educational part of Individual education programof each PhD. student. It focuses on actual findings and recent knowledge about evaluation of phytoavailability of mineral elements from the soil solution and their uptake by plants. The course also provides a knowledge how theseelements are being translocated and where are deposited in plant tissues. The detailed knowledge of interactions in plant-soil system is also provided. The course also providesa training in specific methods of ecophysiological research in the laboratory experiments.	
Recommended literature: Bond W.J., van Wilgen B.W. 2011. Fire and Plants. Springer, 263 pp.Batschauer A. (ed.) 2003. Fotoreceptors and Light Signalling. Science, 388 pp. Henry R.J. 1997. Practical Applications of Plant Molecular Biology. Science, 258 pp.	

Keddy P. 2017. Plant Ecology: Origins, Processes, Consequences. 2ndEd. Cambridge University Press, 624 pp. Taiz, L., Zeiger, E. 2011. Plant Physiology, 5 Edition International Edition, Sinauer Associates, Inc., pp. 782.	
Languages necessary to complete the course: Slovak and English (the literature in English)	
Notes:	
Past grade distribution Total number of evaluated students: 2	
ABS	NEABS
100,0	0,0
Lecturers: doc. Mgr. Boris Bokor, PhD., doc. RNDr. Ľudmila Slováková, CSc., doc. RNDr. Marek Vaculík, PhD., doc. Mgr. Michal Martinka, PhD.	
Last change: 07.11.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2023/2024	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KPI/N-DPEF-001/22	Course title: Soil Science
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning	
Type, volume, methods and workload of the student - additional information Form of education:lectures Recommended range of teaching (in hours):52 Weekly: 2 hrs For the period of study:13 weeks Form of study:combined	
Number of credits: 5	
Recommended semester: 1.	
Educational level: III.	
Prerequisites:	
Course requirements: The final evaluation will be made on the basis of an oral exam. The final evaluation will be completed if the student gives a minimum performance corresponding to 60% of the maximum performance (with manifestations of original thinking, with the ability to analyze, synthesize and interpret). The final evaluation will not be passed if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance, which indicates a lack of knowledge and misunderstanding of the basic components of the course.	
Learning outcomes: The course is a theoretical preparation for the dissertation exam and students will therefore deepen the knowledge they have acquired at lower levels of study. In addition, however, the lectures are focused on modern approaches in soil science, in which students get acquainted with a process-oriented view of the soil system, which characterizes the soil as a dynamic system, whose properties cannot be reduced to partial soil processes. The course therefore follows up on other lectures in the field of physical, chemical or biological processes and seeks to link this partial knowledge into a comprehensive view of the soil system.	
Class syllabus: Introduction to a process-oriented soil science. Characteristic properties of soil dynamic system. Soil processes in different time scales. Thermodynamics and kinetics of soil processes. Soil as a chemical reactor. Soil processes at regional and global scales. Carbon sequestration and climate change. Waste, pollution and soil health. Interaction of soil processes with other components of the environment. Paleopedology and pedoarcheology.	
Recommended literature:	

Frink, Douglas S., 2011: Explorations into a Dynamic Process-Oriented Soil Science. Elsevier. 125p.
Hillel D., 1998: Environmental Soil Physics. Fundamentals, Applications, and Environmental Considerations. Imprint: Academic Press, 771 p.
Richter, J., 1987: The Soil as a Reactor. Modelling Processes in the Soil. Catena, 192 p.

Languages necessary to complete the course:

Slovak and English (the literature in English)

Notes:

Past grade distribution

Total number of evaluated students: 2

ABS	NEABS
100,0	0,0

Lecturers: prof. RNDr. Pavel Dlapa, PhD., doc. Mgr. Ivan Šimkovic, PhD., prof. RNDr. Alexandra Šimonovičová, CSc.

Last change: 28.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-506/22				Course title: Supervisor of the SSC contribution			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 4							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 8							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-404/22			Course title: V1 Scientific output as a whole - ESB monograph (originally AAA, ABA), individual authorship less than 3 AH				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 20							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 0							
A	ABS	B	C	D	E	FX	NEABS
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-401/22			Course title: V1 Scientific output as a whole – ESB monograph (originally AAA, ABA), individual authorship share ≥ 3 AH				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 30							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 1							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-405/22			Course title: V2 Scientific output as part - study in ESB or collection (originally AAB, ABA, ABB), individual authorship less than 3 AH				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 20							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 3							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-402/22			Course title: V2 Scientific output as part - study in ESB or collection (originally AAB, ABA, ABB), individual authorship share ≥ 3 AH				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 30							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 0							
A	ABS	B	C	D	E	FX	NEABS
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-411/22			Course title: V2 Scientific output as part of ESB, collection - contribution in peer reviewed scientific collection, monograph (originally AEC, AFA, AFC, AED)				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 6							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 333							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-406/22				Course title: V3 Scientific output as a part - study in a journal (originally AAB, ABA, ABB), individual authorship less than 3 AH			
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 20							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 1							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-403/22			Course title: V3 Scientific output as a part - study in a journal (originally AAB, ABA, ABB), individual authorship ≥ 3 AH				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 30							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 0							
A	ABS	B	C	D	E	FX	NEABS
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-410/22			Course title: V3 Scientific output in a journal outside the index databases (originally ADE, ADF)				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 12							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 52							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-407/22			Course title: V3 Scientific output in a journal registered by CCC, WOS, SCOPUS - JCR/Q1 – Q2 (originally ADC, ADD, ADM, ADN), first or corresponding author				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 50							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 130							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-408/22			Course title: V3 Scientific output in a journal registered by CCC, WOS, SCOPUS - JCR/Q3- Q4 (originally ADC, ADD, ADM, ADN), first or corresponding author				
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 40							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 62							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							

COURSE DESCRIPTION

Academic year: 2023/2024							
University: Comenius University Bratislava							
Faculty: Faculty of Natural Sciences							
Course ID: PriF/N-DSSZ-409/22		Course title: V3 Scientific output in the journal registered by CCC, WOS, SCOPUS - JCR/Q1 – Q2 – Q3 - Q4 (originally ADC, ADD, ADM, ADN), co-author					
Educational activities: Type of activities: Number of hours: per week: per level/semester: Form of the course: on-site learning							
Number of credits: 20							
Recommended semester:							
Educational level: III.							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 235							
A	ABS	B	C	D	E	FX	NEABS
0,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0
Lecturers:							
Last change:							
Approved by:							