Course descriptions

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COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-412/22	Abstract of a contribution from a domestic or an intenational 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: 423

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-001/22	Advanced Inorganic Chemistry 1

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 study: lecture / seminar / self-study
Number of contact hours: per week: 1/ 2/1 per level/semester: 13 / 26/13
Study method: on-site, distance or combined

Number of credits: 5

Recommended semester: 1.

Educational level: III.

Prerequisites:

Course requirements:
The evaluation reflects the sufficient orientation of the student in the given issue at the level: "pass" or "fail". The final evaluation will be "pass" if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be "fail" if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
The aim of the course is to expand students' knowledge in the field of inorganic chemistry, focusing on the application of inorganic substances in frontier sciences, where their physical and / or biological properties and effects can be utilized. Students will be able to understand the mechanisms of formation and reactivity of coordination compounds and inorganic materials. They
will understand the relationships between spectral properties and the structure of inorganic substances. The lectures will introduce modern applications and advanced inorganic chemistry with a focus on bioinorganic and materials chemistry.

Class syllabus:
• The fundamentals of chemical bonding - various theories relevant to inorganic chemistry
• Symmetry and structure
• Extensive systems
• Stereochemistry and bonds in compounds of non-transient elements
• Year works and student presentations on selected topics in advanced inorganic chemistry

Recommended literature:
1. F. A. Cotton , G. Wilkinson, C. A. Murillo, M. Bochmann: Advanced Inorganic Chemistry 6th Editioni, Wiley, 1999, ISBN-13: 978-0471199571

2. P.Atkins, T.Overton, J.Rourke, M.Weller, F. Armstrong, Inorganic Chemistry, Oxford University
Press 2010
3. M.Weller, J.Rourke, T.Overton, F.Armstrong, Inorganic Chemistry, 2014
4. C.E,Housecraft, A.G.Sharpe, Inorganic Chemistry, Pearson 2012
5. Current monographic and journal literature and information sources of the Internet.

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:

Past grade distribution
Total number of evaluated students: 6

ABS	NEABS
100,0	0,0

Lecturers: prof. RNDr. Gustáv Plesch, DrSc., prof. RNDr. Jozef Noga, DrSc.

Last change: 18.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-002/22	Advanced Inorganic Chemistry 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
Form of study: lecture / seminar / self-study
Number of contact hours: per week: 1/ 2/1 per level/semester: 13 / 26/13
Study method: on-site, distance or combined

Number of credits: 5

Recommended semester: 2.

Educational level: III.

Prerequisites:

Course requirements:
The evaluation reflects the sufficient orientation of the student in the given issue at the level: "pass" or "fail". The final evaluation will be "pass" if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be "fail" if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
The aim of the course is to expand and deepen students' knowledge of inorganic chemistry, synthesis and applications of inorganic substances in current advanced applications and frontier sciences, where their physical and / or biological properties and effects are utilized. Students will be able to understand the fundamental relationships between the periodicity of chemical properties, chemical structure and properties of inorganic compounds, which are used in various applications, especially in advanced materials and bioinorganic chemistry and nanotechnologies.

Class syllabus:
• Hydrogen and Group 18 elements; Elements of the 11th and 12th groups; Group 13 elements; 14th group elements; Group 15 elements; Elements of the 16th group; Elements of the 17th group; Transition elements of the fourth period; Transitional elements of the fifth and sixth periods, lanthanides
• Year works and student presentations on selected topics in advanced inorganic chemistry

Recommended literature:
1. P.Atkins, T.Overton, J.Rourke, M.Weller, F. Armstrong, Inorganic Chemistry, Oxford University
Press 2010

2. M.Weller, J.Rourke, T.Overton, F.Armstrong, Inorganic Chemistry, 2014
3. C.E,Housecraft, A.G.Sharpe, Inorganic Chemistry, Pearson 2012
4. F. A. Cotton , G. Wilkinson, C. A. Murillo, M. Bochmann: Advanced Inorganic Chemistry 6th Editioni, Wiley, 1999, ISBN-13: 978-0471199571
5. Current monographic and journal literature and information sources of the Internet.

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:

Past grade distribution
Total number of evaluated students: 3

ABS	NEABS
100,0	0,0

Lecturers: prof. RNDr. Gustáv Plesch, DrSc., prof. RNDr. Jozef Noga, DrSc.

Last change: 18.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-505/22	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: 140

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-504/22	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: 50

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-414/22	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: 19

A	ABS	B	C	D	E	FX	NEABS
0,0	94,74	0,0	0,0	0,0	0,0	0,0	5,26

Lecturers:

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-415/22	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: 25

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-416/22	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: 47

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/PriF-DSSZ-001/22	Dissertation 1

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
Without specification due to the doctoral degree of study.
On-site, distance or combined study method.

Number of credits: 5

Recommended semester: 1.

Educational level: III.

Prerequisites:

Course requirements:
The evaluation of the course is individual according to the individual study plan of the doctoral student. Completion of the course is assessed by classification levels “pass” or “fail”. The final evaluation will be “pass” if the student submits a minimum performance corresponding to 60% of the
maximum performance. The final evaluation will be “fail” if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance.

Learning outcomes:
By completing this course, the student will gain sufficient orientation in the issue of project of the dissertation in accordance with the specifics of individual topics. This body of knowledge is essential
for the graduate’s well-established theoretical readiness in terms of his/her knowledge, but it also supports the development of his/her potential in a wide range of applied practice. Undoubtedly, the outcomes of education will also be reflected in the student’s overview in terms of methodological approaches in the subject matter.

Class syllabus:
The course Dissertation 1 is a compulsory part of the doctoral student’s study activities. It acquires a sovereignly individual character due 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 course is important especially in terms of understanding the basic theoretical and methodological aspects of the topics of the dissertation with emphasis on self-study and consultation with the supervisor and a wide range of consultants. It participates in creating the professional potential of the doctoral student in the next (scientific) stage of his/her studies.

Recommended literature:

Without specification due to the nature of the specific topic of the dissertation. Recommended literature is included in the doctoral student's individual study plan.

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:

Past grade distribution
Total number of evaluated students: 6

ABS	NEABS
100,0	0,0

Lecturers:

Last change: 28.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/PriF-DSSZ-002/22	Dissertation 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:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 4

ABS	NEABS
100,0	0,0

Lecturers:

Last change: 28.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/PriF-DSSZ-003/22	Dissertation 3

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:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution
Total number of evaluated students: 8

ABS	NEABS
100,0	0,0

Lecturers:

Last change: 28.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/PriF-DSSZ-004/22	Dissertation 4

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:
Course evalutation will be conducted individually based on the doctoral student‘s individual study plan, as well as on the basis of an agreement between the academic supervisor and doctoral student. Evaluation is standard and shall reflect a sufficient orientation of the student in the presented subject matter for successful course completion according to the Study Regulations of the Faculty of Natural Sciences UK.

Learning outcomes:
By passing this subject, the student will achieve sufficient orientation in the project issue of the dissertation thesis based on specific individual topics. This set task of knowledge is essential for a firmly established theoretical readiness of the course graduate in terms of his/her awareness, and equally supports his/her potential in a wide field of applied practice. Undoubtedly, the outcomes of his/her education will also be reflected in the student’s overview in terms of methodological approaches in the subject matter.

Class syllabus:
The subject Dissertation Thesis is a compulsory part of the doctoral student’s study activities. The student requires a supremely individual character with regard to the specifics of the individual topics of the dissertation thesis. The basic syllabus should already be 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 solution to the topic of the dissertation thesis with emphasis on self-study and consultation with the academic supervisor and a wide spectrum of consultants, who will take part in creating the professional potential of the doctoral student for the next (scientific) stage of his/her studies.

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:

Slovak language in combination with English (study literature in English)

Notes:

Past grade distribution
Total number of evaluated students: 8

ABS	NEABS
100,0	0,0

Lecturers:

Last change: 03.10.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KAgCh/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	
Number of credits: 5	
Recommended semester: 1.	
Educational level: III.	
Prerequisites:	
Course requirements: Conditions for passing the course: Course evalutation will be conducted individually based on the doctoral student‘s individual study plan, as well as on the basis of an agreement between the academic supervisor and doctoral student. Evaluation is standard and shall reflect a sufficient orientation of the student in the presented subject matter for successful course completion according to the Study Regulations of the Faculty of Natural Sciences UK.	
Learning outcomes: Educational outcomes: By passing this subject, the student will achieve sufficient orientation in the project issue of the dissertation thesis based on specific individual topics. This set task of knowledge is essential for a firmly established theoretical readiness of the course graduate in terms of his/her awareness, and equally supports his/her potential in a wide field of applied practice. Undoubtedly, the outcomes of his/her education will also be reflected in the student’s overview in terms of methodological approaches in the subject matter.	
Class syllabus: Brief outline of the course: The subject Dissertation Thesis is a compulsory part of the doctoral student’s study activities. The student requires a supremely individual character with regard to the specifics of the individual topics of the dissertation thesis. The basic syllabus should already be 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 solution to the topic of the dissertation thesis with emphasis on self-study and consultation with the academic supervisor and a wide spectrum of consultants, who will take part in creating the professional potential of the doctoral student for the next (scientific) stage of his/her studies.	
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)

Notes:

Past grade distribution
Total number of evaluated students: 8

ABS	NEABS
100,0	0,0

Lecturers:

Last change: 18.10.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KAgCh/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	
Number of credits: 5	
Recommended semester: 6.	
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: 5

ABS	NEABS
100,0	0,0

Lecturers:
Last change:
Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/PriF-DSSZ-007/22	Dissertation 7

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: 7.

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

ABS	NEABS
100,0	0,0

Lecturers:

Last change:

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KAgCh/PriF-DSSZ-024/22	**Course title:** Dissertation 8
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: 8.	
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

ABS	NEABS
0,0	0,0

Lecturers:
Last change:
Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/PriF-DSSZ-025/22	Dissertation 9

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: 9.

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

ABS	NEABS
0,0	0,0

Lecturers:

Last change:

Approved by:

STATE EXAM DESCRIPTION

Academic year: 2022/2023	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KAgCh/N-DGAG-400/22	**Course title:** Dissertation Exam
Number of credits: 15	
Educational level: III.	
State exam syllabus:	
Last change:	
Approved by:	

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-006/22	Doctoral Seminar in Inorganic chemistry 1

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 study: seminar
Number of contact hours: per week: 2 per level/semester: 26
Study method: on-site, distance or combined

Number of credits: 3

Recommended semester: 1.

Educational level: III.

Prerequisites:

Course requirements:
Active participation in seminars, presentation of the topic and partial results of the dissertation. Completion of the course is assessed by classification levels “pass” or “fail”. The final evaluation will be “pass” if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be “fail” if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
Study of the topic of the assigned dissertation, methods of its research and data processing. The aim is to teach the doctoral student to work with scientific literature, interpret the results of various types of laboratory analyses, and critically evaluate their limits. The doctoral student will learn to present and discuss the partial results of his/her dissertation.

Class syllabus:
Status of development and planning of work on the project of the dissertation. Discussion on the chapters of the dissertation based on the set objectives. Formal and content shortcomings of the dissertation. Presentation and evaluation of the results of the dissertation with discussion in the presence of members of the department.

Recommended literature:
1. D. Meško, D. Katuščák, J. Findra, Akademická príručka. Osveta, Martin, 2013.
2. Current monographic and journal literature and information sources on the Internet.
3. Original and review articles in scientific journals.

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:	
Past grade distribution Total number of evaluated students: 6	
ABS	NEABS
100,0	0,0
Lecturers: doc. Mgr. Olivier Monfort, PhD., RNDr. Lukáš Krivosudský, PhD., RNDr. Milan Sýkora, PhD.	
Last change: 18.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-007/22	Doctoral Seminar in Inorganic chemistry 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
Form of study: seminar
Number of contact hours: per week: 2 per level/semester: 26
Study method: on-site, distance or combined

Number of credits: 3

Recommended semester: 1.

Educational level: III.

Prerequisites:

Course requirements:
Active participation in seminars, presentation of the topic and partial results of the dissertation. Completion of the course is assessed by classification levels “pass” or “fail”. The final evaluation will be “pass” if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be “fail” if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
Study of the topic of the assigned dissertation, methods of its research and data processing. The aim is to teach the doctoral student to work with scientific literature, interpret the results of various types of laboratory analyses, and critically evaluate their limits. The doctoral student will learn to present and discuss the partial results of his/her dissertation.

Class syllabus:
Status of development and planning of work on the project of the dissertation. Discussion on the chapters of the dissertation based on the set objectives. Formal and content shortcomings of the dissertation. Presentation and evaluation of the results of the dissertation with discussion in the presence of members of the department.

Recommended literature:
1. D. Meško, D. Katuščák, J. Findra, Akademická príručka. Osveta, Martin, 2013.
2. Current monographic and journal literature and information sources on the Internet.
3. Original and review articles in scientific journals.

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:	
Past grade distribution Total number of evaluated students: 5	
ABS	NEABS
100,0	0,0
Lecturers: doc. RNDr. Erik Rakovský, PhD., Mgr. Martin Motola, PhD.	
Last change: 18.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-008/22	Doctoral Seminar in Inorganic chemistry 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
Form of study: seminar
Number of contact hours: per week: 2 per level/semester: 26
Study method: on-site, distance or combined

Number of credits: 3

Recommended semester: 1.

Educational level: III.

Prerequisites:

Course requirements:
Active participation in seminars, presentation of the topic and partial results of the dissertation. Completion of the course is assessed by classification levels “pass” or “fail”. The final evaluation will be “pass” if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be “fail” if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
Study of the topic of the assigned dissertation, methods of its research and data processing. The aim is to teach the doctoral student to work with scientific literature, interpret the results of various types of laboratory analyses, and critically evaluate their limits. The doctoral student will learn to present and discuss the partial results of his/her dissertation.

Class syllabus:
Status of development and planning of work on the project of the dissertation. Discussion on the chapters of the dissertation based on the set objectives. Formal and content shortcomings of the dissertation. Presentation and evaluation of the results of the dissertation with discussion in the presence of members of the department.

Recommended literature:
1. D. Meško, D. Katuščák, J. Findra, Akademická príručka. Osveta, Martin, 2013.
2. Current monographic and journal literature and information sources on the Internet.
3. Original and review articles in scientific journals.

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:	
Past grade distribution Total number of evaluated students: 1	
ABS	NEABS
100,0	0,0
Lecturers: doc. RNDr. Jozef Tatiersky, PhD., Mgr. Peter Hrobárik, PhD.	
Last change: 18.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-400/22	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: 103

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-413/22	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: 2022/2023	
University: Comenius University Bratislava	
Faculty: Faculty of Natural Sciences	
Course ID: PriF.KAgCh/N-DSSZ-303/22	**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 creative activities in the area of research or development or for independent theoretical and creative artistic creativity. It should be charactersied by a high degree of analysis and synthesis of knowledge, as well as a sufficient overview of existing literature. The work must be original and created by the author in compliance with the rules of working with information sources. The academic work must not appear to be plagiarised, nor infringe the copyrights of other authors. The author is required to thoroughly cite the information sources used, list the specific results of other authors or team of authors by citing the source, accurately describe the methods and working procedures of other authors or teams of authors, and document the laboratory results and field research of other authors or teams of authors. Style of citation is governed by the practice in the given scientific field, respecting the relevant norms and standards.	
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: 19.10.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-508/22	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: 332

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-501/22	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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-503/22	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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-502/22	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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-507/22	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: 367

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: 2022/2023	
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.	
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: 179

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 Slováková, PhD.

Last change: 03.10.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-DSSZ-027/22	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., 4.

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: 43

ABS	NEABS
100,0	0,0

Lecturers: Mgr. Aneta Barnes

Last change: 03.10.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-009/22	Selected chapters from coordination chemistry 1

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 study: lecture / seminar / self-study
Number of contact hours: per week: 1/ 2/1 per level/semester: 13 / 26/13
Study method: on-site, distance or combined

Number of credits: 5

Recommended semester: 1.

Educational level: III.

Prerequisites:

Course requirements:
The evaluation reflects the sufficient orientation of the student in the given issue at the level: "pass" or "fail". The final evaluation will be "pass" if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be "fail" if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
The aim of the course is to expand students' knowledge in the field of coordination chemistry, focusing on the use of group theory, molecular orbital theory, the properties of organometallic compounds and the reactivity of complexes.

Class syllabus:
1. Symmetry - elements and operations of symmetry, point, plane and space symmetry groups, group generators, group symbolism, relationship of symmetry and physico-chemical properties. 2. Stereochemistry of coordination compounds. 3. Ligand field theory. 4. Organometallic compounds. 5. Biologically important complexes.

Recommended literature:
1. U. Müller: Inorganic Structural Chemistry. 2nd Edition. John Wiley & Sons, Ltd., Chichester, 2006.
2. C. Giacovazzo, H. L. Monaco, G. Artioli, D. Viterbo, G. Ferraris, G. Gilli, G. Zanotti, M. Catti:
Fundamentals of Crystallography. 3rd Edition. Oxford University Press, Oxford, 2011.
3. Housecroft, C., Sharpe, A. G.: Anorganická chemie, Vydavatelství VŠCHT, 2014.
4. Crabtree, R. H.: The Organometallic Chemistry of the Transition Metals. 4th ed. Wiley, 2005.

5. Kaim, W., Schwederski, B., Klein, A.: Bioinorganic Chemistry: Inorganic Elements in the Chemistry of Life. 2nd ed. Wiley, 2013.
6. Current monographic and journal literature and Internet information sources.

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:

Past grade distribution
Total number of evaluated students: 0

ABS	NEABS
0,0	0,0

Lecturers: Mgr. Peter Hrobárik, PhD., doc. RNDr. Jozef Tatiersky, PhD., RNDr. Lukáš Krivosudský, PhD.

Last change: 18.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-010/22	Selected chapters from coordination chemistry 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
Form of study: lecture / seminar
Number of contact hours: per week: 1/1 per level/semester: 13/13
Study method: on-site, distance or combined

Number of credits: 3

Recommended semester: 1., 2.., 3., 4..

Educational level: III.

Prerequisites:

Course requirements:
The evaluation reflects the sufficient orientation of the student in the given issue at the level: "pass" or "fail". The final evaluation will be "pass" if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be "fail" if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
The aim of the course is to expand students' knowledge of coordination chemistry with a specific focus on the relationship between the structure and properties of complexes and their use in homogeneous and heterogeneous catalysis (such as C-H bond activation, CO2 reduction) and various areas of materials chemistry such as optoelectronics, solar cells, molecular sensors, bioimaging or spintronics. Students will gain an overview of different synthetic approaches, possibilities of isolation and purification of complexes, theoretical modeling, spatial structures, symmetry, bond types, electronic structure, and will be able to understand the mechanisms of formation and reactivity of these compounds. They will understand the relationships between spectral properties and structure.

Class syllabus:
1. Coordination compounds - types and strength of bonds, spatial structures, symmetry, isomerism, electronic structure, trans effect, low and high spin states.
2. Preparation and reactivity of coordination compounds.
3. Significant coordination compounds of s, p, d and f elements - electronic structure, their specifics and use.
4. Electronic transitions and characterization of coordination compounds by various spectroscopies (NMR, IR, EPR, UV-vis).

5. Use of complexes in homogeneous and heterogeneous catalysis.
6. Spin states, spin cross-over, molecular magnetism.
7. Structure and use of coordination compounds in optoelectronics, energy conversion and bioimaging using fluorescence and phosphorescence microscopy.
8. Structure and use of coordination compounds as molecular sensors.

Recommended literature:

a) Housecroft, C. E .; Sharpe, A. G. Inorganic Chemistry, 5th ed .; Pearson: Harlow, UK, 2018.
b) Shriver, D .; Weller, M .; Overton, T .; Rourke, J .; Armstrong, F. Inorganic Chemistry, 6th ed .; Oxford University Press, UK, 2014.
c) Cotton, F. A .; Wilkinson, G .; Murillo, C. A .; Bochmann, M. Advanced Inorganic Chemistry, 6th ed
.; Wiley: Chichester, UK, 1999.
d) Current literature from high-impact journals (Nature, Science, JACS, ACIE), including review articles in Chemical Reviews or Chemical Society Reviews.

Languages necessary to complete the course:

Slovak in combination with English (study literature in Slovak and English).

Notes:

Past grade distribution

Total number of evaluated students: 0

ABS	NEABS
0,0	0,0

Lecturers: doc. RNDr. Erik Rakovský, PhD., Mgr. Peter Hrobárik, PhD., doc. RNDr. Jozef Tatiersky, PhD., RNDr. Lukáš Krivosudský, PhD.

Last change: 18.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-011/22	Selected chapters from coordination chemistry 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
Form of study: lecture / seminar
Number of contact hours: per week: 1/1 per level/semester: 13/13
Study method: on-site, distance or combined

Number of credits: 3

Recommended semester: 1., 2.., 3., 4..

Educational level: III.

Prerequisites:

Course requirements:
The evaluation reflects the sufficient orientation of the student in the given issue at the level: “pass” or “fail”. The final evaluation will be “pass” if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be “fail” if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
The aim of the course is to expand students' knowledge in the field of coordination chemistry with a specific focus on the use of coordination compounds in catalytic processes, including industrial applications and catalysis in biological systems. Another part of the course is the use of advanced crystallographic methods in the study of coordination compounds, especially methods of quantum crystallography, as well as the possibility of using neutron and electron diffraction.

Class syllabus:
1. Kinetics and reaction mechanisms of coordination compounds. 2. Complexes with p-acceptor and p-donor ligands. 3. Coordination compounds in catalytic processes, metalloenzymes, enzymomimetics, methods of studying catalytic processes. 4. Use of advanced crystallographic methods in coordination chemistry - charge and spin densities, quantum crystallography, neutron and electron diffraction methods.

Recommended literature:
1. Current monographic, magazine literature and Internet information sources.
2. P. Petrovič, V. Haber, Š. Toma: Basics of Coordination Chemistry. Comenius University in Bratislava, 1983.

3. P. Coppens: X-Ray Charge Densities and Chemical Bonding. Oxford University Press, Oxford, 1997.
4. C. Gatti, P. Macchi: Modern Charge Density Analysis. Springer Verlag Dordrecht, 2012.
5. C. Giacovazzo, H. L. Monaco, G. Artioli, D. Viterbo, G. Ferraris, G. Gilli, G. Zanotti, M. Catti:
Fundamentals of Crystallography. 3rd Edition. Oxford University Press, Oxford, 2011.

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:

Past grade distribution
Total number of evaluated students: 0

ABS	NEABS
0,0	0,0

Lecturers: doc. RNDr. Erik Rakovský, PhD., Mgr. Peter Hrobárik, PhD., doc. RNDr. Jozef Tatiersky, PhD., RNDr. Lukáš Krivosudský, PhD.

Last change: 18.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-012/22	Selected chapters from material chemistry 1

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 study: lecture / seminar / self-study
Number of contact hours: per week: 1 / 2 / 1 per level/semester: 13 / 26/13
Study method: on-site, distance or combined

Number of credits: 5

Recommended semester: 1.

Educational level: III.

Prerequisites:

Course requirements:
The evaluation reflects the sufficient orientation of the student in the given issue at the level: "pass" or "fail". The final evaluation will be "pass" if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be "fail" if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
The aim of the course is to expand students' knowledge in the field of inorganic materials. Students will gain an overview of spatial structures, symmetry, bond types, electronic structure, will be able to understand the basic methods of acquisition, preparation and characterization of inorganic materials. They will understand the relationships between spectral properties and structure.

Class syllabus:
What are materials, material categorization, inorganic materials, natural resources, mining and extraction, chemical and physical preparation methods, top-down and bottom-up methods, types of solid phase interactions and bonds, ionic, metallic, covalent and molecular materials, amorphous and crystalline materials, basics of crystallography, symmetry, electronic structure of solids, optical properties of inorganic materials, characterization methods, diffraction methods, microscopy, optical methods, selected examples from modern research of materials and their practical use.

Recommended literature:
1. H. R. Allcock: Introduction to Materials Chemistry, Wiley, 2019 ISBN: 978-1-119-34725-5
2. W.D. Kingery, H.K. Bowen, D.R. Uhlmann, Introduction to Ceramics (second edition), John Wiley & sons, 2006. ISBN 9812-53-141-6

3. Current original scientific papers, monographs and review articles in scientific journals

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:

Past grade distribution
Total number of evaluated students: 1

ABS	NEABS
100,0	0,0

Lecturers: doc. RNDr. Erik Rakovský, PhD., doc. Ing. Zoltán Lenčéš, PhD., RNDr. Milan Sýkora, PhD., doc. Mgr. Olivier Monfort, PhD., Mgr. Martin Motola, PhD.

Last change: 18.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-013/22	Selected chapters from material chemistry 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
Form of study: lecture / seminar
Number of contact hours: per week: 1/ 1 per level/semester: 13/13
Study method: on-site, distance or combined

Number of credits: 3

Recommended semester: 1., 2.., 3., 4..

Educational level: III.

Prerequisites:

Course requirements:
The evaluation reflects the sufficient orientation of the student in the given issue at the level: "pass" or "fail". The final evaluation will be "pass" if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be "fail" if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
The aim of the course is to expand students' knowledge in the field of materials chemistry with a specific focus on inorganic nanomaterials, which show a dependence of properties based on their size and shape. Students will gain an overview of the physical nature of this phenomenon, methods of preparation of this group of materials, the connection between the structure and optical and electrical properties, methods of characterization and the possibilities of their practical use.

Class syllabus:
Overview and categorization of nanomaterials, metallic and semiconductor nanocrystals, quantum restriction effect, plasmonics, dependence of material properties on size and shape, 0D, 1D and 2D nanomaterials, chemical methods of preparation of quantum restricted nanomaterials, colloidal syntheses, size and shape control, surface properties control, nanoheterostructures, perovskite materials, methods of characterization of nanomaterials, examples of the use of quantum limited nanomaterials in practice, interactions with living systems.

Recommended literature:
1. Current original scientific papers, monographs and review articles in scientific journals

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:	
Past grade distribution Total number of evaluated students: 0	
ABS	NEABS
0,0	0,0
Lecturers: doc. Ing. Zoltán Lenčéš, PhD., RNDr. Milan Sýkora, PhD., doc. Mgr. Olivier Monfort, PhD., Mgr. Martin Motola, PhD.	
Last change: 18.09.2022	
Approved by:	

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KAgCh/N-DCAG-014/22	Selected chapters from material chemistry 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
Form of study: lecture / seminar
Number of contact hours: per week: 1/ 1 per level/semester: 13/13
Study method: on-site, distance or combined

Number of credits: 3

Recommended semester: 1., 2.., 3., 4..

Educational level: III.

Prerequisites:

Course requirements:
The evaluation reflects the sufficient orientation of the student in the given issue at the level: “pass” or “fail”. The final evaluation will be “pass” if the student submits a minimum performance corresponding to 60% of the maximum performance. The final evaluation will be “fail” if the student submits an unacceptably poor performance corresponding to less than 60% of the maximum performance. The conditions for successful completion of the course are also regulated by the Study Regulations of the Faculty of Natural Sciences of Comenius University in Bratislava.

Learning outcomes:
The aim of the course is to expand students' knowledge of materials chemistry with a specific focus on the synthesis and application of inorganic nanomaterials. Students will gain an overview of synthetic procedures, theoretical modeling and real applications of materials. The course is focused on current trends in materials research.

Class syllabus:
The course is focused on presenting the current level of knowledge mainly in the field of synthesis and applications of materials, including their physico-chemical properties. Emphasis is placed on 1. presentation of current trends in materials chemistry, 2. thorough analysis of 0D-3D nanomaterials, 3. synthesis of nanomaterials by advanced methods, including 4. electrochemical, 5. so-called. "Wet synthesis" and solid phase 6 synthesis. Applications of these materials in the areas of 7. solar and fuel cells, 8. photocatalytic water and air purification, 9. batteries and 10. hydrogen production will be primarily introduced. Last but not least, students will get acquainted with the future of materials chemistry by introducing 11. nanorobotics and 12. 4D materials.

Recommended literature:
1. Current original scientific papers, monographs and review articles in scientific journals

2. Dieter Vollath, Nanomaterials: an introduction to synthesis, properties, and applications, WILEY-
VCH, Print ISBN: 978-3-527-33379-0
3. O. Monfort, Introduction to photochemical processes for environmental purposes: The case of vanadium-based oxides, Comenius University Bratislava (2022) ISBN 978-80-223-5380-9

Languages necessary to complete the course:
Slovak in combination with English (study literature in Slovak and English).

Notes:

Past grade distribution
Total number of evaluated students: 0

ABS	NEABS
0,0	0,0

Lecturers: doc. Ing. Zoltán Lenčéš, PhD., RNDr. Milan Sýkora, PhD., doc. Mgr. Olivier Monfort, PhD., Mgr. Martin Motola, PhD.

Last change: 18.09.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KDPP/N-DSSZ-500/22	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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-DSSZ-022/22	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: 40

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-DSSZ-023/22	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: 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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-DSSZ-024/22	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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF.KJ/N-DSSZ-028/22	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: 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: Mgr. Karin Rózsová Wolfová

Last change: 18.10.2022

Approved by:

COURSE DESCRIPTION

Academic year: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-506/22	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: 6

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-404/22	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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-401/22	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: 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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-405/22	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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-402/22	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: 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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-411/22	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: 202

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-406/22	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: 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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-403/22	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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-410/22	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: 39

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: 2022/2023	
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: 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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-408/22	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: 38

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: 2022/2023

University: Comenius University Bratislava

Faculty: Faculty of Natural Sciences

Course ID:	**Course title:**
PriF/N-DSSZ-409/22	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: 153

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: