

Course descriptions

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COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFL.KDMFI/2-UIN-120/22	Course title: Didactics of Informatics (1)
Educational activities: Type of activities: course Number of hours: per week: 2 per level/semester: 26 Form of the course: on-site learning	
Number of credits: 2	
Recommended semester: 2.	
Educational level: II., N	
Prerequisites:	
Course requirements: In-term evaluation: Written assignments, active participation in class, and reports (60 %), didactic outputs, creation and analysis of methodological materials (20 %), study of professional materials (20 %). The results of problems solved, discussed and active participation in seminars are counted towards the final maximum of 100 points a student can earn. Another regular obligation is weekly writing on the topic studied. Indicative grading scale: A 90 %, B 82 %, C 74 %, D 67 %, E 60 % Scale of assessment (preliminary/final): 100/0	
Learning outcomes: The student acquires a synthesizing view of the issues of teaching informatics and cultivates an overall didactic overview and perception; reflects on the place of informatics in general education, considers the necessary reforms, innovations and obstacles in this context; knows and can compare these contexts in different countries at different stages of development of informatics education; is aware of the differences between the development of digital literacy in education and school informatics - their different and common goals and practices; knows in detail the curricula of the subject informatics at primary and secondary school and its extension forms at secondary school, up to thematriculation (final) exam; knows various didactic procedures for teaching informatics; knows how to deal with various common and specific didactic situations in informatics classes; understands the importance and potential of programming in the implementation of the educational content of other subject areas; knows modern methods of evaluation in informatics; knows various support activities related to informatics education; knows various project and cross-curricular methods suitable for the development of computational thinking; knows modern areas of informatics suitable as attractive topics for secondary school seminars. Thinks about, discusses, and implements productive collaboration between informatics and other subjects.	
Class syllabus: Challenges of modern education, transformation of educational systems in the context of the development of informatics education. General didactics and disciplinary didactics. The role of digital technologies in the process of education and forms of their integration. Digital literacy	

and informatics. Different concepts of teaching informatics - at home and abroad. Problems of development of informatics education in different educational contexts. Holistic approach to pupil development and the potential of informatics in it. Modern view of programming and its role in the development of informatics thinking. Educational goals of informatics in different educational systems. Didactic situations in informatics and ways of solving them. Promotion of social constructivism in informatics. Objectives and forms of assessment in informatics education. Forms of cooperation with other teachers and cross-curricular activities.

Recommended literature:

- Kalaš, I. a kol.: Premeny školy v digitálnom veku. Bratislava: Slovenské pedagogické nakladateľstvo, 2013
- the subject lecturer's own electronic texts
- selection of up-to-date professional materials from the world research literature
- Kalaš, I.: Informatika na križovatke. Didinfo 2021
- up-to-date materials for teaching informatics on the portal of the IT Akadémia and iMyšlení projects, materials of the DVUi project

Languages necessary to complete the course:

Slovak, for the study of some items from the recommended literature, also English as a secondary language

Notes:

Past grade distribution

Total number of evaluated students: 129

A	B	C	D	E	FX
86,05	5,43	2,33	4,65	0,78	0,78

Lecturers: prof. RNDr. Ivan Kalaš, PhD.

Last change: 23.06.2022

Approved by: prof. RNDr. Ivan Kalaš, PhD.

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFLKDMFI/2-UMA-105/22	Course title: Didactics of Mathematics (2)
Educational activities: Type of activities: seminar Number of hours: per week: 4 per level/semester: 52 Form of the course: on-site learning	
Number of credits: 4	
Recommended semester: 2.	
Educational level: II., N	
Prerequisites:	
Course requirements: Continuous assessment: individual preparation of a lesson plan and its placement in the thematic plan, microteaching, preparation of written tests (2 equal groups), peer assessment, didactic analysis of teaching texts, reading and discussion of scientific articles. The student must obtain at least 50% of the continuous assessment and each assignment must be evaluated with a non-zero number of points. Exam: written with oral consultation Indicative assessment scale: A 94%, B 86%, C 79%, D 70%, E 60%, Fx <60% Scale of assessment (preliminary/final): 60/40	
Learning outcomes: The graduate of the course is acquainted with the goals of mathematics education at lower secondary school, with adequate teaching methods, forms and means, with ways of introducing selected mathematical concepts, is ready for his work in school and out of school, can transfer to pedagogical practice knowledge and skills acquired in individual professional disciplines. The study of scientific and research articles with a subsequent discussion or an authentic experience will give graduates a better insight into the cognitive and affective components of mathematics teaching at lower secondary school.	
Class syllabus: Specifics of teaching mathematics for individual topics and concepts of mathematics at lower secondary school: educational goals, activities, the assumption of the development of student understanding in the context of educational activities and the creation of a hypothetical trajectory. Selection of adequate methods, forms and age-appropriate activities for teaching mathematics at the second stage of primary school. Integration of digital technologies into the teaching of mathematics also in order to support argumentation, reasoning, and building a mathematical culture (correctness of concepts, procedures, arguments, etc.).	
Recommended literature: Dítě, škola a matematika: Konstruktivistické přístupy k vyučování / Milan Hejný, František Kuřina. Praha : Portál, 2001	

Moderní vyučování / Geoffrey Petty. Praha : Portál, 1993
 Is this a coincidence? The role of examples in fostering a need for proof / Buchbinder, O., Zaslavsky, O., ZDM Mathematics Education 43, 269 (2011). <https://doi.org/10.1007/s11858-011-0324-7>
 Elementary and Middle School Mathematics: Teaching Developmentally. / John A. Van de Walle, Karen Karp, Jennifer M. Bay-Williams. Pearson. 2012
 Strategies for Teaching Fractions: Using Error Analysis for Intervention and Assessment / David B. Spangler.
 Dvacet pět kapitol z didaktiky matematiky / Milan Hejný, Jarmila Novotná, Nad'a Stehlíková (Eds.) Praha, 2004
 Dostupné učebnice Matematiky pre 5. – 9. ročník ZŠ a nižšie ročníky osemročných gymnázií / Ján Žabka, Pavol Černek / Ondrej Šedivý a kol. / Soňa Čeretková a kol. / Milan Hejný a kol.
 Nový Pomocník z matematiky (5. – 9. ročník) / Iveta Kohanová a kol.
 Own electronic materials published via the subject's website (eg course in LMS Moodle)

Languages necessary to complete the course:

slovak, english

Notes:

Past grade distribution

Total number of evaluated students: 194

A	B	C	D	E	FX
65,46	17,53	12,37	3,09	1,03	0,52

Lecturers: doc. PaedDr. Mária Slavičková, PhD., doc. PaedDr. Peter Vankúš, PhD.

Last change: 17.06.2022

Approved by: prof. RNDr. Ivan Kalaš, PhD.

COURSE DESCRIPTION

Academic year: 2026/2027					
University: Comenius University Bratislava					
Faculty: Faculty of Mathematics, Physics and Informatics					
Course ID: FMFLKDMFI/2- pUXX-901/20		Course title: Diploma Thesis Project			
Educational activities: Type of activities: seminar Number of hours: per week: 2 per level/semester: 26 Form of the course: on-site learning					
Number of credits: 0					
Recommended semester: 2.					
Educational level: N					
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	B	C	D	E	FX
100,0	0,0	0,0	0,0	0,0	0,0
Lecturers: RNDr. Monika Dillingerová, PhD., doc. PaedDr. Monika Tomesányiová, PhD.					
Last change:					
Approved by: prof. RNDr. Ivan Kalaš, PhD.					

COURSE DESCRIPTION

Academic year: 2026/2027					
University: Comenius University Bratislava					
Faculty: Faculty of Mathematics, Physics and Informatics					
Course ID: FMFLKDMFI/2- pUXX-135/21		Course title: Educational Research and Educational Diagnostics			
Educational activities: Type of activities: course Number of hours: per week: 2 per level/semester: 26 Form of the course: on-site learning					
Number of credits: 2					
Recommended semester: 1., 3.					
Educational level: N					
Prerequisites:					
Course requirements:					
Learning outcomes:					
Class syllabus:					
Recommended literature:					
Languages necessary to complete the course:					
Notes:					
Past grade distribution Total number of evaluated students: 23					
A	B	C	D	E	FX
60,87	17,39	21,74	0,0	0,0	0,0
Lecturers: Mgr. Lucia Budinská, PhD., PaedDr. Mgr. Natália Kováčová, PhD.					
Last change: 15.09.2021					
Approved by: prof. RNDr. Ivan Kalaš, PhD.					

STATE EXAM DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFLKDMFI/2- pUXX-951/19	Course title: General Pedagogy
Number of credits: 0	
Educational level: N	
State exam syllabus:	
Last change: 29.11.2019	
Approved by: prof. RNDr. Ivan Kalaš, PhD.	

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFL.KDMFI/1-UFY-220/15	Course title: Introduction to School Experiments
Educational activities: Type of activities: lecture / laboratory practicals Number of hours: per week: 2 / 2 per level/semester: 26 / 26 Form of the course: on-site learning	
Number of credits: 5	
Recommended semester: 1.	
Educational level: I., N	
Prerequisites:	
Course requirements: Continuous assessment: written test (10 marks), individual work projects (2x20 marks), practical test (10 marks) Exam: oral (40 marks) Indicative assessment scale: A 90%, B 80%, C 70%, D 60%, E 50% Credits will be awarded if the student obtains at least 50% marks.	
Learning outcomes: Graduates have the knowledge, skills and abilities necessary for the methodology and technique of performing several types of school physical measurements and experiments in the physics curriculum of lower secondary and high schools.	
Class syllabus: Phases of a school experiment, types of school experiments, measurements and observations, possibilities of a computer-aided science laboratory, measurement with sensors, basics of video measurement, basics of preparation of interactive animations. Preparation of instruction for a student for an experiment planned by a teacher, preparation and assignment of a student planning experiment. Empirical cognition in school physics, basics of measuring results, student work in empirical cognition.	
Recommended literature: Evidence based teaching : A practical approach / Geoff Petty. Cheltenham : Nelson Thornes, 2006 Počítačom podporované prírodovedné laboratórium / Peter Demkanin a kol.. Bratislava : Knižničné a edičné centrum, 2006 Demkanin, P, Didaktika fyziky, UK 2018 Klentschy, Michael P.: Scaffolding Science Inquiry Through Lesson Design Own electronic texts of the subject published through the subject's website.	
Languages necessary to complete the course: Slovak and English.	

Notes:

Past grade distribution

Total number of evaluated students: 102

A	B	C	D	E	FX
56,86	22,55	13,73	0,98	2,94	2,94

Lecturers: doc. RNDr. Peter Demkanin, PhD.

Last change: 18.06.2022

Approved by: prof. RNDr. Ivan Kalaš, PhD.

STATE EXAM DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFLKDMFI/2- pUXX-952/19	Course title: Psychology
Number of credits: 0	
Educational level: N	
State exam syllabus:	
Last change: 13.01.2020	
Approved by: prof. RNDr. Ivan Kalaš, PhD.	

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI-PriF.KDPP/1- UXX-141/22	Course title: Psychology for Teachers (1)
Educational activities: Type of activities: lecture / seminar Number of hours: per week: 2 / 2 per level/semester: 26 / 26 Form of the course: on-site learning	
Number of credits: 4	
Recommended semester: 1.	
Educational level: I., II., N	
Prerequisites:	
Antirequisites: FMFI-PriF.KDPP/1-UXX-131/10	
Course requirements: The course is completed by an exam, the evaluation ratio is 50% of the continuous evaluation + 50% of the final evaluation. Interim evaluation includes a midterm test (30% of evaluation) and a seminar paper (20% of evaluation). The final evaluation includes the final exam (50% of the evaluation). To successfully complete the course, it is necessary to obtain at least 60% of points. The rating is given on a scale: A (100-92%, excellent - excellent results), B (91-84%, very good - above average standard), C (83-76%, good - normal reliable work), D (75-68%, satisfactory - acceptable results), E (67-60%, sufficient - results meet minimum criteria), Fx (59-0%, insufficient - additional work required) Scale of assessment (preliminary/final): 50/50	
Learning outcomes: The aim of the course Psychology for Teachers 1 is to make basic information about the general laws of human experience and behavior so that they can provide a platform for understanding the functioning of the human psyche and synthesize psychological knowledge, facts, theories, research approaches to a comprehensive view of the individual's psyche for creative professional application. in pedagogical practice. After completing the course, the student is able to orientate in the terminology of general and developmental psychology, can apply the knowledge of general and developmental psychology in the educational context, knows the laws of psychology, especially with regard to the needs of lower and upper secondary education, knows the laws of cognitive processes and their application in the educational process.	
Class syllabus:	

1. Introduction to psychology: psychology as a science, the subject of psychological research, approaches in psychology, the importance and use of psychology in the school environment and in the work of teachers.
2. Research and research methods in psychology: the importance of scientific knowledge, features of scientific work and methodology of psychological research.
3. Research and definition of mental processes. Mental and cognitive processes. Cognitive processes in the developmental and educational context in the school environment
 - a. perception, current research and its applications in the school environment. Interpretation and distortions in connection with the perception of the teacher.
 - b. Attention processes. Attention concentration, switching, current approaches. Multitasking and attention in the context of school performance and success.
 - c. Memory processes. Basic models of memory and their relation to education. Elaboration as a tool for effective remembering. Interference. Memory as an ability.
4. Representation and organization of knowledge, thinking: characteristics of thinking and its types. Terms: their connection and learning. Judgment and decision making. Fixed and growth-oriented mind settings. Problem solving: types of problems, problem solving strategies.
5. Intelligence: theory of intelligence, measurement of intelligence. Stability and development of intellectual abilities in relation to education. Intellectual talent.
6. Introduction to developmental psychology. Basic concepts, subject of research and methods of developmental psychology.
7. Mental development in general - determinants of development, character and types of developmental changes, characteristics of development from a psychological point of view, critical periods in development.
8. Selected developmental theories I.
9. Selected developmental theories II.
10. Periodization of development and characteristics of individual development periods I. with emphasis on the period of school age
11. Periodization of development and characteristics of individual development periods II. with an emphasis on adolescence
12. Basics of developmental psychopathology.

Recommended literature:

- ATKINSON, R.C. et al. (2003) Psychology. Prague: Portal.
- FONTANA, D. (1997) Psychology in school practice. Prague: Protal.
- HORT, V. et al. (2008) Child and adolescent psychiatry. Prague: Portal
- HOLEČEK, V. (2014) Psychology in teaching practice. Prague: City.
- LANGMEIER, J.-KREJČÍŘOVÁ, D. (2006). Developmental Psychology. City.
- STERNBERG, R., J. (2009). Cognitive psychology. Portal.
- VÁGNEROVÁ, M. (2000) Developmental psychology. Childhood, adulthood, old age. Prague: Portal.
- VESELSKÝ, M. (2001) Educational Psychology 1. Theory and practice. Bratislava: Comenius University.
- VESELSKÝ, M. (2005) Educational Psychology 2. Theory and practice. Bratislava: Comenius University.

Languages necessary to complete the course:

Slovak and Czech language, English language (text comprehension)

Notes:

Past grade distribution					
Total number of evaluated students: 697					
A	B	C	D	E	FX
22,96	16,5	23,53	17,36	15,64	4,02
Lecturers: Mgr. Eva Paulisová, PhD., PhDr. ThLic. Peter Ikhardt, PhD., RNDr. Jana Ciceková, PhD.					
Last change: 16.09.2022					
Approved by: prof. RNDr. Ivan Kalaš, PhD.					

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI-PriF.KDDP/1- UXX-142/22	Course title: Psychology for Teachers (2)
Educational activities: Type of activities: lecture / seminar Number of hours: per week: 2 / 2 per level/semester: 26 / 26 Form of the course: on-site learning	
Number of credits: 4	
Recommended semester: 2.	
Educational level: I., II., N	
Prerequisites: FMFI-PriF.KDPP/1-UXX-141/22 - Psychology for Teachers (1)	
Antirequisites: FMFI-PriF.KDPP/1-UXX-135/10	
Course requirements: The course is completed by an exam, the evaluation ratio is 50% of the continuous evaluation + 50% of the final evaluation. Continuous assessment includes active participation in seminars (at least 80% of the teaching part), presentation of the selected topic (20%) and elaboration of an essay (30%). Completion of these assignments is a condition of admission to the final exam. The final evaluation includes the final exam (50% of the evaluation). To successfully complete the course, it is necessary to obtain at least 60% of points. The rating is given on a scale: A (100-92%, excellent - excellent results), B (91-84%, very good - above average standard), C (83-76%, good - normal reliable work), D (75-68%, satisfactory - acceptable results), E (68-60%, sufficient - results meet minimum criteria), Fx (59-0%, insufficient - additional work required) Scale of assessment (preliminary/final): 50/50	
Learning outcomes: The aim of the course Psychology for Teachers 2 is to make available the knowledge of personality psychology and educational psychology so that they can form the basis for understanding the functioning of the human psyche and synthesize psychological knowledge and theories into a comprehensive view of the individual's psyche for creative professional application in pedagogical practice. The aim of the course is also to increase the sensitivity of students to interindividual diversity in the school environment, to develop their psychological literacy and ability to apply current knowledge of theoretical and applied psychological disciplines in educational practice. After completing the course, the student is able to orientate in the terminology of personality psychology and educational psychology and can use the knowledge from these disciplines in designing an educational unit, knows the psychological context of the educational process.	

Class syllabus:

1. Personality psychology and interindividual differences. Understanding personality in psychology. Application of personality psychology in pedagogical practice.
2. Biological and social bases of personality. Personality structure - temperament, character, abilities, motivation.
3. Personality typologies and their importance in educational practice. Personality of the teacher.
4. Psychology of learning - types, laws and conditions of learning. Selected approaches and theories of learning.
5. Psychological issues of motivation in the field of education. Resources and factors influencing motivation. Types of motivation. Selected theories of motivation. Performance motivation, goals and self-regulation.
6. Creativity in education - conditions and models of creative learning. Increasing creativity in students.
7. Pupils' performance in the educational process. School success vs. failure, failure of students. Psychological testing of students. Test and pre-test conditions. Evaluation and self-evaluation.
8. Psychosocial climate and class / school atmosphere as a factor of optimal education. Classroom communication. Class engagement and teacher influence. School classroom management and administration.
9. School class as a social group, the position of the individual - the student in it.
10. Learning disabilities. Pupils' problems in survival and behavior. Emotionality, self-image and aggression in the school environment. Psychological aspects of school inclusion. The role of the school psychologist and his help to the school.
11. Positive psychology in the school environment. Empathy and prosocial behavior in the classroom. Emotions in education and their importance. Active participation, interest, commitment, curiosity.
12. Personality in difficult life situations. Stress management. Load resistance. Mental health and psychohygiene at school. Prevention of bullying, mobbing and burnout.

Recommended literature:

- ATKINSON, R.C. et al. (2003) Psychology. Prague: Portal.
- ČÁP, P. & MAREŠ, J. (2001) Psychology for Teachers. Prague: Portal.
- FONTANA, D. (1997) Psychology in school practice. Prague: Protal.
- HOLEČEK, V. (2014) Psychology in teaching practice. Prague: City.
- VÁGNEROVÁ, M. (2005). School counseling psychology for teachers. Prague: Karolinum
- VÁGNEROVÁ, M. (2010). Personality psychology. Prague: Karolinum
- VENDEL, S. (2007). Educational psychology. Bratislava: Epos
- VESELSKÝ, M. (2001) Educational Psychology 1. Theory and practice. Bratislava: Comenius University.
- VESELSKÝ, M. (2005) Educational Psychology 2. Theory and practice. Bratislava: Comenius University.

Languages necessary to complete the course:

Slovak and Czech language, English language (text comprehension)

Notes:**Past grade distribution**

Total number of evaluated students: 524

A	B	C	D	E	FX
30,53	20,8	19,47	17,56	8,59	3,05

Lecturers: Mgr. Eva Paulisová, PhD., RNDr. Jana Ciceková, PhD.
Last change: 16.09.2022
Approved by: prof. RNDr. Ivan Kalaš, PhD.

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/1-UXX-331/22	Course title: School Management
Educational activities: Type of activities: lecture / seminar Number of hours: per week: 1 / 2 per level/semester: 13 / 26 Form of the course: on-site learning	
Number of credits: 3	
Recommended semester: 2.	
Educational level: I., II., N	
Prerequisites:	
Antirequisites: FMFI-Prif.KDPP/1-UXX-331/15	
Course requirements: The condition for successful completion of the course is to obtain at least 60% of the maximum possible evaluation of the course. The work during the semester on partial tasks from different areas and levels of school management will be evaluated: - reading and presentation of recommended literature (10%) - active participation in exercises (35%) - attendance at lectures and feedback on lectures (20%) - report+presentation in pairs (15%) - final written exam (20%) The rating is given on a scale: A: 93-100%, excellent - excellent results, B: 85-92%, very good - above average standard, C: 76-84%, good - normal reliable work, D: 68-75%, satisfactory - acceptable results, E: 60-67%, sufficient - the results meet the minimum criteria, Fx: 0-59%, insufficient - additional work required Scale of assessment (preliminary/final): 80 / 20	
Learning outcomes: Knowledge of the school system in the Slovak Republic in comparison with successful education systems in other countries, understanding of the management system and organization of education in the Slovak Republic at all levels, orientation in school and labor legislation, pedagogical documents, electronic systems used in primary and secondary schools (eg Edupage). Ability to apply knowledge of other disciplines in the field of school management.	
Class syllabus: Basic terminology of school management. Education system in the Slovak Republic and education management system. School management models. Personality of a leading pedagogical employee	

- legal and personal requirements, leadership styles. Hierarchy of education workers. Control activities in schools, apprenticeship. School and labor legislation (legal regulations governing the activities of primary and secondary schools - laws, decrees, work regulations, pedagogical-organizational instructions, pedagogical documentation), time management. Edupage. Teacher professional development. Class teacher.

Recommended literature:

HALÁKOVÁ, Z., NAGYOVÁ, S., NAGY, T. 2019. School management for students of science subjects with practical examples. Bratislava: UK.
OBDRŽÁLEK, Z. 2002. School and its management. Bratislava: UK.
OBDRŽÁLEK, Z., HORVÁTHOVÁ, K. et al. 2004. Organization and management of education. Terminological and interpretative dictionary. Bratislava: SPN.
EGER, L. 2006. School management. Pilsen: Fraus.
PISOŇOVÁ, M. 2012. Personality development of the school principal - starting points and determinants.
Current legal regulations governing the activities of primary and secondary schools (laws, decrees, internal regulations, pedagogical-organizational instructions).
Pedagogical documentation
WONG, H. K., WONG, R.T. The first days of school: How to be an effective teacher. Mountain View, CA: Harry K. Wong Publications, 2005.
LAU, W. Teaching Computing in Secondary Schools: A Practical Handbook. Routledge, 2017.
LEMOV, D. Teach like a champion 2.0: 62 techniques that put students on the path to college. John Wiley & Sons, 2015.
CANGELOSI, J. S. Classroom Management Strategies: How to Gain and Maintain Pupils' Cooperation in Teaching. Portal, 1996.
Current Internet resources and journal sources (Education Technology, School Management in Practice, Quality and more).

Languages necessary to complete the course:

Communication - Slovak
Study of literature - Slovak, English

Notes:

Past grade distribution

Total number of evaluated students: 167

A	B	C	D	E	FX
53,29	16,77	20,36	4,79	0,6	4,19

Lecturers: doc. Mgr. Karolína Miková, PhD., PaedDr. Tünde Kozánek Kiss, PhD.

Last change: 22.06.2022

Approved by: prof. RNDr. Ivan Kalaš, PhD.

COURSE DESCRIPTION

Academic year: 2026/2027							
University: Comenius University Bratislava							
Faculty: Faculty of Mathematics, Physics and Informatics							
Course ID: FMFLKDMFI/2- pUXXx-110/20				Course title: Teachers' Training by Classroom Observation			
Educational activities: Type of activities: practice Number of hours: per week: per level/semester: 20s Form of the course: on-site learning, combined							
Number of credits: 0							
Recommended semester: 2.							
Educational level: N							
Prerequisites:							
Course requirements:							
Learning outcomes:							
Class syllabus:							
Recommended literature:							
Languages necessary to complete the course:							
Notes:							
Past grade distribution Total number of evaluated students: 67							
A	ABS	B	C	D	E	FX	NEABS
19,4	77,61	0,0	0,0	0,0	0,0	1,49	1,49
Lecturers: PaedDr. Peter Horváth, PhD., Mgr. Michaela Vargová, PhD., RNDr. Michal Winczer, PhD., Mgr. Emília Miřková, PhD., PaedDr. Mgr. Natálie Kováčová, PhD.							
Last change: 16.06.2023							
Approved by: prof. RNDr. Ivan Kalař, PhD.							

COURSE DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFI.KDMFI/1-UXX-134/22	Course title: Theory of Teaching
Educational activities: Type of activities: lecture / seminar Number of hours: per week: 2 / 1 per level/semester: 26 / 13 Form of the course: on-site learning	
Number of credits: 3	
Recommended semester: 1.	
Educational level: I., II., N	
Prerequisites:	
Antirequisites: FMFI.KDMFI/1-UXX-134/18	
Course requirements: The course is completed by a written exam (20%). A minimum of 60% of the semester is required to be admitted to the exam. During the semester, students implement at least one didactic output (20%), actively participate in exercises (20%), solve assignments during lectures (10%), prepare a term paper (10%), read and report the content of recommended literature (10%), 2 tests during the semester (10%) The rating is given on a scale: A: 93-100%, excellent - excellent results, B: 85-92%, very good - above average standard, C: 76-84%, good - normal reliable work, D: 68-75%, satisfactory - acceptable results, E: 60-67%, sufficient - the results meet the minimum criteria, Fx: 0-59%, insufficient - additional work required Scale of assessment (preliminary/final): 80 /0 20	
Learning outcomes: Acquisition of basic theoretical knowledge in didactics, development of knowledge, skills and attitudes associated with the teaching profession, the ability to plan and organize students' learning activities. Students will gain an overview of basic didactic terminology, knowledge prerequisites to view the teaching process as a system whose individual elements (teaching objectives, curriculum content, teaching methods, teaching aids and techniques, organizational forms of teaching, teaching concepts; communication between teacher and students, as well as monitoring and evaluation of the teaching process and teacher preparation for teaching) are closely linked and to be able to use the acquired knowledge in specific planning of the teaching process (creating a "scenario" of the lesson). They will gain basic habits of working with the class as a group.	
Class syllabus:	

Didactics as a scientific discipline (subject of research, methods of didactic research, terminology), its position in the system of pedagogical disciplines
 Didactics system
 Teaching process
 Content of education, curriculum, didactic analysis of curriculum
 Taxonomy of educational goals
 Teaching planning
 Teaching principles
 Teaching methods, teaching strategies
 Testing and evaluation
 Learning tasks and didactic tests
 Current teaching concepts (project, problematic, programmed, differentiated, group, cooperative, problematic, project, research-oriented, authentic, constructivist, online, electronic, hybrid, modular, integrated thematic (ITV), STEM / STEAM, mastery learning, closed cycle (SVUC), Hejného method
 Organizational forms of teaching
 Teaching aids and teaching equipment

Recommended literature:

ČAPEK, R. 2015. Modern didactics: Lexicon of teaching and assessment methods. Prague: City.
 FERENCOVÁ, J., KOSTURKOVÁ, M. 2020. Chapters from didactics. From learning to teaching. Prešov: Rokus publishing.
 KALHOUS, Z., OBST, O. 2001. School didactics. Prague: Portal.
 SKALKOVÁ, J. 2007. General didactics. 2nd ed. Prague: City.
 KOŽUCHOVÁ, M. et al. 2000. General didactics. Bratislava: Science.
 OBDRŽÁLEK, Z. et al. 2003. Didactics for elementary school students. Bratislava: UK.
 PASCH, M. et al. 1998. From educational program to lesson. Prague: Portal.
 PETLÁK, E. 2016. General didactics. Bratislava: Iris.
 PETTY, G. 1996. Modern teaching. Prague: Portal.
 PRŮCHA, J. 2002. Modern pedagogy. 3rd ed. Prague: Portal.
 TUREK, I. 2014. Didactics. Bratislava: Iura Edition.
 TÓTHOVÁ, R., KOSTRUB, D., FERKOVÁ, Š. 2017. Pupil, teacher, teaching. Bratislava: Rokus.

Languages necessary to complete the course:

Slovak, Czech

Notes:

Past grade distribution

Total number of evaluated students: 195

A	B	C	D	E	FX
41,54	27,18	15,38	7,18	1,54	7,18

Lecturers: doc. Mgr. Karolína Miková, PhD., Mgr. Lucia Budinská, PhD.

Last change: 22.06.2022

Approved by: prof. RNDr. Ivan Kalaš, PhD.

STATE EXAM DESCRIPTION

Academic year: 2026/2027	
University: Comenius University Bratislava	
Faculty: Faculty of Mathematics, Physics and Informatics	
Course ID: FMFL.KDMFI/2- pUXX-911/20	Course title: Thesis Defence
Number of credits: 0	
Educational level: N	
State exam syllabus:	
Last change: 16.06.2023	
Approved by: prof. RNDr. Ivan Kalaš, PhD.	