

Name of university, Name of faculty: Trnava University
Faculty of Education

INFORMATION SHEET OF THE SUBJECT

Code: YMIS104		Name: Didactics of Informatics	
Cover: Department of Mathematics and Computer Science			
Type of educational activity: Lecture, Seminar, Professional Training		Number of credits: 6	Recommended semester: WT
Scope of educational activity (in hours): Weekly: 2/2/1 For term of study: ZS 46,46,23			Study grade: Master
Method of educational activity: Attendance			
Recommended semester	Study programme		
2.year WT	Rozširujúce štúdium v študijnom programe učiteľstvo informatiky v kombinácii (RSI)		
4.year WT	teaching for primary schools for the educational field of mathematics and informatics (XYVOMaI)		
Underlie subjects:			
Conditions for passing the course: Method of evaluation: Completion by taking an examination Continuous evaluation: The continuous evaluation consists of three parts. The first part is the completion of assignments during the semester, for which the student may receive a maximum of 15 points. The second part of the continuous assessment is the preparation of a portfolio from the pedagogical practice, for which the student may obtain 20 points, however, in the case of the assessment from the continuous pedagogical practice, the student must obtain a minimum of 10 points. The third part of the mid-term evaluation is the elaboration and subsequent presentation of a semester project, for which the student may obtain 30 points, but in the case of the semester project evaluation the student must obtain a minimum of 15 points. Final evaluation: The final evaluation consists of a written test for which the student may obtain a maximum of 35 points. The questions asked during the final assessment are oriented on the position and content of informatics in the state educational programme for primary and secondary schools and on the teaching of subjects and thematic units of informatics and their specificities. The condition for successful completion of the course is obtaining a minimum of 15 points in the final assessment. Finished: The course is completed on the basis of the results of the continuous and final evaluation. A minimum of 91 points is required for an A grade, a minimum of 81 points is required for a B grade, a minimum of 71 points is required for a C grade, a minimum of 61 points is required for a D grade and a minimum of 51 points is required for an E grade. A condition for passing the course is also the implementation of the non-contact part of the course. This consists of continuous pedagogical practice, which is also realized by regular study of the material covered in lectures, regular preparation for the next seminar, and preparation of the student for pedagogical practice, preparation for teaching, consultation with the trainee teacher and preparation of a portfolio from the realized pedagogical practice in the scope of at least 40 pages, preparation of a semester project, continuous systematic study of the recommended study literature and preparation for a written test.			
Learning outcomes: LO1 The student will gain an overview of the aims, content, prescribed standards, modern didactic methods and tools for teaching school informatics. LO2 The student will acquire basic knowledge and skills in the theory and practice of teaching informatics in schools. LO3 The student is able to include specific topics in the classroom, can develop a preparation for the lesson, design a methodology for teaching a selected topic of school informatics, which includes its own and interactive teaching aid. LO4 The student is able to prepare a written test/assignment for pupils and evaluate it. LO5 The student is able to complete the portfolio of a teacher of informatics (thematic plan, written preparations for teaching with self-reflection, worksheet with formative assessment tools, interactive educational aid, graduation assignment, graded system of tasks, evaluated didactic test). LO6 The student will be able to apply the acquired knowledge in his/her future practice as a teacher of informatics in primary and secondary schools.			
Schedule of subject: Introduction to the didactics of informatics. Informatics in the state educational programme for primary and secondary schools Specifics of teaching informatics subjects - departmental didactics. Computer work for beginners. Health and safety regulations and health protection when working with computers. Competitions in computer science. Innovative teaching methods in the subject of computer science (such as problem-based and project-based learning, cooperative and collaborative learning, connectivism, contextualism, inquiry-based learning, etc.). Working with text and graphics (problem-based learning). Spreadsheets and databases (problem-based and project-based learning). Internet and communication (cooperative learning and connectivism). Fostering creativity in the classroom - constructionism and constructivism. Worksheet development with selected formative assessment tools. Formative assessment of student performance, cognitive and metacognitive tools and classification. The final examination in computer science. Preparing the computer science teacher for teaching (lesson structure). The computer as a universal didactic tool in the teaching of computer science subjects.			
Recommended reading: STOFFOVÁ, V. – GABALOVÁ, V.: Vybrané kapitoly teórie vyučovania informatiky I. 1. vyd. Trnava : Trnavská univerzita v Trnave, Pedagogická fakulta, 2020. ISBN 978-80-568-0209-0. ČERNOCHOVÁ, M. – KOMRSKA, T. – NOVÁK, J.: Využití počítače při vyučování : náměty pro práci dětí s počítačem. Praha : Portál, 1998. ISBN 80-7178-272-6. STOFFOVÁ, V. a kol.: Informatika, informačné technológie a výpočtová technika. Nitra : FPV UKF, 2001. STOFFOVÁ, V.: Počítač – univerzálny didaktický prostriedok, 1. vyd. Nitra : FPV UKF, 2004. 172 s.			

GUNIŠ, J. – SUDOLSKÁ, M. – ŠNAJDER, E.: Ďalšie vzdelávanie učiteľov základných a stredných škôl v predmete informatika : Aktivizujúce metódy vo výučbe školskej informatiky. Bratislava : Štátny pedagogický ústav, 2009, 40 s. ISBN 978-80-89225-96-5. Dostupné z: https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/aktivizujuce_metody.pdf.

Učebnice informatiky pre základné a stredné školy.

Softvér z balíka Infovek pre školy. Vybrané materiály z konferencií a z internetu.

Language requirements: Slovak

Notes:

Course evaluation:

Assessed students in total: 0

A	B	C	D	E	FX
0%	0%	0%	0%	0%	0%

Lecturers:

PaedDr. Veronika Gabaľová, PhD., examiner, instructor

prof. Ing. Veronika Stoffová, CSc., lecturer, examiner

Date of last change: 01.09.2026

Approved by: prof. Ing. Veronika Stoffová, CSc.