

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

INFORMATION SHEET OF THE SUBJECT

Code: XPEB332		Name: Combinatorics and working with data			
Cover: Department of School Education					
Type of educational activity: Seminar Scope of educational activity (in hours): Weekly: 2 For term of study: ZS 46 Method of educational activity: Combined				Number of credits: 3	Recommended semester: WT Study grade: Bachelor
Recommended semester	Study programme				
1.year WT	Pre-School Elementary Pedagogy (DPEP_E1) Pre-School Elementary Pedagogy (XPEP-D1) Pre-School Elementary Pedagogy (XPEP-E1)				
Underlie subjects:					
Conditions for passing the course: Method of evaluation: Completion by taking an examination Continuous evaluation: None. Final evaluation: The final evaluation consists of a written test for which a maximum of 100 points can be obtained. The content of the test follows the items in the schedule of the course. Finished: The course is completed based on the summation of the points obtained in three continuous test. A minimum of 91 points is required for getting 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 part is realized mainly by regular study of the material covered in the last seminar, regular preparation for the next seminar, studying the e-course in Moodle and working with interactive applications, studying the recommended study literature, studying the video recordings available in Teams, preparing for the written test.					
Learning outcomes: LO1 The student learns to solve appropriate combinatorial tasks in different ways, to use appropriate algorithms for their solutions and to be able to use them in solving probability tasks LO2 The student acquires the basic knowledge of descriptive statistics necessary for effective work with data in the form of tables and graphs and is able to use them, for example, in the preparation for the final thesis LO3 The student is able to apply the acquired knowledge in their future practice as a teacher of pre-primary or primary education in the development of children's combinatorial thinking and in working with data					
Schedule of subject: Solving combinatorial tasks by systematic listing of the possibilities The summation rule and the product rule Types of combinatorial problems, combinations, variations, permutations Use of combinatorics in solving appropriate probability tasks Medians and measures of variability Presentation of data in the form of tables and graphs Bivariate distributions					
Recommended reading: POKORNÝ, M.: Kombinatorika a práca s údajmi. Trnava : Pedagogická fakulta Trnavskej univerzity v Trnave, 2019 HÍC, P. – POKORNÝ, M.: Opisná štatistika. On-line kurz, 2008, Trnava. ISBN 978-80-8082-201-9 ČERNEK, P. – KUBÁČEK, Z.: Nová maturita, matematika, ústna časť, SPN 2005 ČERNEK, P. – KUBÁČEK, Z.: Nová maturita, matematika, testy, SPN 2004					
Language requirements: Slovak, English					
Notes:					
Course evaluation: Assessed students in total: 1208					
A	B	C	D	E	FX
22%	23%	22%	16%	13%	5%
Lecturers: doc. PaedDr. Milan Pokorný, PhD., lecturer, examiner, instructor, seminary supervisor					
Date of last change: 01.09.2026					
Approved by: prof. PhDr. Oľga Zápotočná, CSc.					