Module description

Module title					Abbreviation
Didactics of Mathematics - Arithmetics and Application of Mathematics (Ger-					10-M-DGGS2-152-m01
Madula acordinator					
Doan of Studios Mathematik (Mathematics)				Institute of Mathematics	
FCTS Method of grading					
7 numerical grade					
Duration			Other prerequisites		
2 semester		undergraduate			
Contents					
In-depth discussion of topics in teaching arithmetics and application-oriented mathematics in Grundschule, ta- king didactic aspects into account (aims of teaching arithmetics, didactic principles, sets, numbers, positional notations, arithmetic models, elementary arithmetic, mental calculation, half-written and written calculations, aims of teaching applications of mathematics, treatment of quantities, representation of data, possibilities of te- aching application-oriented mathematics, heuristic principles, strategies and tools, modelling, mappings, typi- cal difficulties in solving text problems, possibilities of promoting competences in applied calculation). Possibi- lities of implementation in the classroom and employment of materials and media, including modern technolo- gies.					
Intended learning outcomes					
The student knows about the objectives of teaching mathematics in elementary school, basics in developmental psychology and didactics of mathematics, fundamentals in elementary school mathematics, as well as import- ant models, presentations and media which can be employed in elementary school teaching of mathematics. She/he knows about common difficulties and problems of pupils in the acquisition of mathematical skills, and can employ and assess didactical principles and teaching and learning strategies.					
Courses (type, number of weekly contact hours, language — if other than German)					
$V(2) + \ddot{U}(1) + V(2) + \ddot{U}(2)$					
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)					
a) oral examination of one candidate each (approx. 30 minutes) or b) oral examination in groups (groups of 2, approx. 15 minutes per candidate) or c) written examination (approx. 60 to 120 minutes)					
Allocation of places					
Additional information					
Workload					
210 h					
Reference Image: Construction regulations for teaching-degree programmes) S rot Nr. (
8 51 INI- 4 Module appears in					
First state examination for the teaching degree Grundschule Mathematics (2015)					
exchange program Mathematics (2023)					

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