### Module title

**Didactics of Mathematics: Algebra (German Gymnasium)**

| Abbreviation | 10-M-DiGY-122-m01 |

### Module coordinator

Dean of Studies Mathematik (Mathematics)

### Module offered by

Institute of Mathematics

### ECTS

3

### Method of grading

Numerical grade

### Only after succ. compl. of module(s)

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### Duration

1 semester

### Module level

Undergraduate

### Other prerequisites

Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.

### Contents

Discussion of basic topics in mathematics didactics for Gymnasium using the example of algebra (Sekundarstufe I) as well as discussion of possibilities of implementation in the classroom, also including modern technologies.

### Intended learning outcomes

The student is acquainted with basic mathematical ways of thinking and working techniques (in particular in the field of algebra in Sekundarstufe I) and is able to take into account the students' perception of mathematical topics, He/She knows important aspects of planning and analysing teaching of mathematics, masters different strategies for teaching and learning and can assess them.

### Courses

- **V + Ü** (no information on SWS (weekly contact hours) and course language available)

### Method of assessment

- **a)** written examination (approx. 60 to 180 minutes)
- **b)** oral examination of one candidate each (approx. 20 minutes)
- **c)** oral examination in groups of up to 3 candidates (groups of 2: approx. 30 minutes, groups of 3: approx. 45 minutes)
- **d)** written elaboration (approx. 5 to 10 pages)
- **e)** project assignments

### Allocation of places

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### Additional information

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### Referred to in LPO I (examination regulations for teaching-degree programmes)

§ 73 (1) 6. Mathematik Didaktik

### Module appears in

First state examination for the teaching degree Gymnasium Mathematics (2012)