### Module title

School Mathematics from a Didactical Point of View: Algebra online (virtual course)

### Abbreviation

10-M-VHBDAL-191-m01

### Module coordinator

Dean of Studies Mathematik (Mathematics)

### Module offered by

Institute of Mathematics

### ECTS

2

### Method of grading

Only after succ. compl. of module(s)

### (not) successfully completed

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### Duration

1 semester

### Module level

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### Other prerequisites

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### Contents

Algebra didactics is about learning and teaching algebra. This course focuses on the central and important topics in school algebra: extensions of number domains, variables and terms, equations and functions.

### Intended learning outcomes

The students are acquainted with the subject-specific contents of school algebra, and are able to structure the notions and methods within a conceptual map. They know strategies of short, middle and long term development of understanding of the central concepts of algebra in teaching mathematics. They are able to develop and justify learning units and learning sequences for the important topics in school algebra independently. They are able to assess and value the importance of digital technology with respect to todays and future design of instruction. They know various fields of application of algebraic concepts, and are able to perform modelling (in the sense of modelling cycles) independently.

### Courses

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### Method of assessment

Project (web-based, 15 to 20 hours)

Assessment offered: Once a year, winter semester

Other: E-Learning, Vhb

### Allocation of places

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### Additional information

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### Referred to in LPO I

(examination regulations for teaching-degree programmes)

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### Module appears in

First state examination for the teaching degree Gymnasium Mathematics (2019)