## Module title
Overview Algebra and Projective Geometry for Teaching Degree (German Gymnasium)

## Abbreviation
10-M-APGL-Ü-152-m01

## Module coordinator
Dean of Studies Mathematik (Mathematics)

## Module offered by
Institute of Mathematics

## ECTS
10

## Method of grading
Numerical grade

## Only after succ. compl. of module(s)
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## Duration
1 semester

## Module level
Undergraduate

## Other prerequisites
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## Contents
Fundamental algebraic structures (groups, rings, fields), Galois theory; projective and affine planes, projective and affine spaces, theorem of Desargues, fundamental theorems for projective spaces, dualities and polarities of projective spaces.

## Intended learning outcomes
The student is acquainted with fundamental concepts and methods in algebra and projective geometry. He/She is able to relate these concepts with one another, and realises the advantages of thinking across the borders of different branches in mathematics.

## Courses
V (4) + Ü (2)

## Method of assessment
Oral examination of one candidate each (20 to 40 minutes)
Assessment will have reference to the contents of modules 10-M-ALGL and 10-M-PGEL.
Language of assessment: German and/or English

## Allocation of places
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## Additional information
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## Referred to in LPO I
§ 73 I Nr. 2 (5 ECTS credits)
§ 73 I Nr. 4 (5 ECTS credits)

## Module appears in
First state examination for the teaching degree Gymnasium Mathematics (2015)