Module title: Mathematics in Culture and Society

Abbreviation: 10-M-MKG-122-m01

Module coordinator: Dean of Studies Mathematik (Mathematics)

Module offered by: Institute of Mathematics

ECTS: 8

Method of grading: Only after succ. compl. of module(s)

Duration: 2 semester

Module level: undergraduate

Other prerequisites: By way of exception, additional prerequisites are listed in the section on assessments.

Contents

Historical and cultural development as well as social relevance of mathematics; more in-depth discussion of the fundamentals of mathematics, in particular in its relation to other sciences and humanities as well as to the image of mathematics in modern society.

Intended learning outcomes

Based on selected examples, the student has gained insight into the historical and cultural genesis of mathematical theories and their social relevance. He/she is able to present mathematical ideas and concepts to a general audience.

Courses

This module has 4 components; information on courses listed separately for each component.

- 10-M-GES-1-122, 10-M-MSC-1-122, and 10-M-SCH-1-122: V + Ü (no information on language and number of weekly contact hours available)
- 10-M-PRO-1-122: S (no information on language and number of weekly contact hours available)

Method of assessment

This module has the following 4 assessment components. To pass the module as a whole students must pass two of the four assessment components.

Assessment in module component 10-M-GES-1-122: Ausgewählte Kapitel aus der Geschichte der Mathematik (Selected Topics from the History of Mathematics), in module component 10-M-MSC-1-122: Mathematisches Schreiben (Mathematical Writing), and in module component 10-M-SCH-1-122: Schulmathematik vom höheren Standpunkt (School Mathematics from a Higher Perspective):

- 4 ECTS credits, pass / fail
- project assignments (type and expenditure of time to be specified by the lecturer at the beginning of the course)
- Assessment will be offered in the semester in which the course is offered and in the subsequent semester.
- Language of assessment: German; English if agreed upon with examiner(s)
- Additional prerequisites: To qualify for admission to assessment, students must meet certain prerequisites. 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.

Assessment in module component 10-M-PRO-1-122: Proseminar Mathematik (Proseminar Mathematics)

- 4 ECTS credits, pass / fail
- talk (approx. 60 to 180 minutes)
- Assessment will be offered in the semester in which the course is offered and in the subsequent semester.
- Language of assessment: German; English if agreed upon with examiner(s)
- Additional prerequisites: To qualify for admission to assessment, students must meet certain prerequisites. 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 stu-
The document contains a module description for a course. It states that students who have obtained the qualification for admission to assessment over the course of the semester will have their registration for assessment put into effect. Students who meet all prerequisites will be admitted to assessment in the current or subsequent semester. Assessment at a later date requires obtaining the qualification for admission to assessment anew.

**Module description**

- **Additional information**
  - Additional information on module duration: 1 to 2 semesters.
  - Referred to in LPO I (examination regulations for teaching-degree programmes)

**Allocation of places**

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**Module appears in**

- Bachelor' degree (1 major) Mathematics (2012)
- Bachelor' degree (1 major) Mathematics (2013)
- Bachelor' degree (1 major) Computational Mathematics (2012)
- Bachelor' degree (1 major) Computational Mathematics (2013)
- First state examination for the teaching degree Gymnasium Mathematics (2012)

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