

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject Didactics in Mathematics (Middle School) as Didaktikfach with the degree "Erste Staatsprüfung für das Lehramt an Mittelschulen"

Responsible: Faculty of Mathematics and Computer Science
Responsible: Institute of Mathematics

Examination regulations version: 2015
Examination regulations version: 2015

Abbreviations used: Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** = lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions for the modules in this SFB: Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Information on assessment procedures: Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should a module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with the general regulations governing the degree subject described in this module catalogue:

LASPO2015

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

05-Oct-2015 (2015-188)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

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| Abbreviation | Module title | | | | | | |
| | ECTS | | Duration | (in semesters) | Method of grading | | Module level |
| | Courses | | To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y | | | | |
| | Method of assessment | | | | | | |
| | Only after successful completion of | | if applicable | | | | |
| | Other prerequisites | | if applicable | | | | |
| | Participants and allocation of places | | if applicable | | | | |
| | Additional information | | if applicable | | | | |
| | Referred to in LPO I | | if applicable (examination regulations for teaching-degree programmes) | | | | |

Compulsory Courses (20 ECTS credits)

Successful completion of modules worth 20 ECTS credits in each subject selected as Didaktikfach (subject studied with a focus on teaching methodology) is a prerequisite for admission to the Erste Staatsprüfung (First State Examination) in the subject Didaktiken einer Fächergruppe der Mittelschule (Didactics of a Group of Subjects of Mittelschule).

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| 10-M-MM1-152-mo1 | Mathematics in German Mittelschule - Arithmetics | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | undergraduate |
| | Courses | V (2) + Ü (2) | | | | | | |
| | Method of assessment | written examination (approx. 60 to 90 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German; exceptions pursuant to Section 29 Subsection 4 LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | Referred to in LPO I | § 38 I Nr. 1 | | | | | | |
| 10-M-MM2-152-mo1 | Mathematics in German Mittelschule - Algebra | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | undergraduate |
| | Courses | V (2) + Ü (2) | | | | | | |
| | Method of assessment | written examination (approx. 60 to 90 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German; exceptions pursuant to Section 29 Subsection 4 LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | Referred to in LPO I | § 38 I Nr. 1 | | | | | | |
| 10-M-MM3-152-mo1 | Mathematics in German Mittelschule - Geometry | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | undergraduate |
| | Courses | V (2) + Ü (2) | | | | | | |
| | Method of assessment | written examination (approx. 60 to 90 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German; exceptions pursuant to Section 29 Subsection 4 LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | Referred to in LPO I | § 38 I Nr. 1 | | | | | | |

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| 10-M-MM4-152-mo1 | Mathematics in German Mittelschule - Application-oriented Teaching and Stochastics | | | | | | | |
| | ECTS | 5 | Duration | 1 semester | Method of grading | numerical grade | Modul level | undergraduate |
| | Courses | V (2) + Ü (2) | | | | | | |
| | Method of assessment | written examination (approx. 60 to 90 minutes) If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate). Language of assessment: German; exceptions pursuant to Section 29 Subsection 4 LPO I (examination regulations for teaching-degree programmes) | | | | | | |
| | Referred to in LPO I | § 38 I Nr. 1 | | | | | | |
| Freier Bereich (general as well as subject-specific electives) Teaching degree students must take modules worth a total of 15 ECTS credits in the area Freier Bereich (general as well as subject-specific electives) (Section 9 LASPO (general academic and examination regulations for teaching-degree programmes)). To achieve the required number of ECTS credits, students may take any modules from the areas below. Freier Bereich -- interdisciplinary: The interdisciplinary additional offer for a teaching degree can be found in the respective Annex "Ergänzende Bestimmungen für den "Freien Bereich" im Rahmen des Studiums für ein Lehramt". | | | | | | | | |
| Extra Skills Teaching Mathematics at the German Mittelschule (Freier Bereich (general as well as subject-specific electives) -- subject specific) | | | | | | | | |
| 10-M-DCMU-152-mo1 | Computers in Mathematical Teaching | | | | | | | |
| | ECTS | 3 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | V (2) | | | | | | |
| | Method of assessment | project (10 to 15 pages) Assessment offered: Every two years, winter semester | | | | | | |
| | Referred to in LPO I | § 22 II Nr. 2 f) § 22 II Nr. 1 h) § 22 II Nr. 3 f) | | | | | | |
| 10-M-DMMS1-152-mo1 | Methodology of Teaching in Mathematics 1 (German Mittelschule) | | | | | | | |
| | ECTS | 3 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | S (2) | | | | | | |
| | Method of assessment | a) talk (approx. 45 minutes) or b) term paper (5 to 10 pages) or c) project (10 to 15 pages) Assessment offered: Every two years, winter semester | | | | | | |
| | Referred to in LPO I | § 22 II Nr. 1 h) | | | | | | |

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| 10-M-DMMS2-152-m01 | Methodology of Teaching in Mathematics 2 (German Mittelschule) | | | | | | | |
| | ECTS | 3 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | S (2) | | | | | | |
| | Method of assessment | a) talk (approx. 45 minutes) or b) term paper (5 to 10 pages) or c) project (10 to 15 pages) Assessment offered: Every two years, summer semester | | | | | | |
| | Referred to in LPO I | § 22 II Nr. 1 h) | | | | | | |
| 10-M-DVMS1-152-m01 | Advanced Didactics of Mathematics 1 (German Mittelschule) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | S (2) | | | | | | |
| | Method of assessment | a) talk (approx. 45 minutes) or b) term paper (5 to 10 pages) or c) project (10 to 15 pages) Assessment offered: Every two years, winter semester | | | | | | |
| | Referred to in LPO I | § 22 II Nr. 1 h) | | | | | | |
| 10-M-DVMS2-152-m01 | Advanced Didactics of Mathematics 2 (German Mittelschule) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | S (2) | | | | | | |
| | Method of assessment | a) talk (approx. 45 minutes) or b) term paper (5 to 10 pages) or c) project (10 to 15 pages) Assessment offered: Every two years, summer semester | | | | | | |
| | Referred to in LPO I | § 22 II Nr. 1 h) | | | | | | |
| 10-M-DV-HB-152-m01 | E-Learning and Blended Learning in Mathematical Teaching (virtual Course) | | | | | | | |
| | ECTS | 3 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | Ü (2) Course type: eLearning, mostly Virtuelle Hochschule Bayern (vhb) | | | | | | |
| | Method of assessment | project (web-based, 15 to 20 hours) Assessment offered: Once a year, winter semester | | | | | | |
| | Referred to in LPO I | § 22 II Nr. 1 h) § 22 II Nr. 2 f) § 22 II Nr. 3 f) | | | | | | |

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| 10-M-VHBA-ri-152-mo1 | Basics in Arithmetics (virtual course) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | Ü (2) Course type: eLearning, mostly Virtuelle Hochschule Bayern (vhb) | | | | | | |
| | Method of assessment | project (web-based, 15 to 20 hours) Assessment offered: Once a year, winter semester | | | | | | |
| 10-M-VHBGeo-152-mo1 | Basics in School Geometry (virtual course) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | Ü (2) Course type: eLearning, mostly Virtuelle Hochschule Bayern (vhb) | | | | | | |
| | Method of assessment | project (web-based, 15 to 20 hours) Assessment offered: Once a year, summer semester | | | | | | |
| 10-M-VH-BSto-152-mo1 | Stochastics in Sekundarstufe I (virtual course) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | Ü (2) Course type: eLearning, mostly Virtuelle Hochschule Bayern (vhb) | | | | | | |
| | Method of assessment | project (web-based, 15 to 20 hours) Assessment offered: Once a year, winter semester | | | | | | |
| 10-M-VHBM10-152-mo1 | Mathematics in grade 10 (virtual course) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | Ü (2) Course type: eLearning, mostly Virtuelle Hochschule Bayern (vhb) | | | | | | |
| | Method of assessment | project (web-based, 15 to 20 hours) Assessment offered: Once a year, summer semester | | | | | | |
| | Referred to in LPO I | | | | | | | |
| | § 22 II Nr. 1 h) § 22 II Nr. 2 f) § 22 II Nr. 3 f) | | | | | | | |
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| 10-M-DGMS-152-mo1 | Didactics of Elementary School Mathematics for Teachers at German Mittelschule and Special Education | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | S (2) | | | | | | |
| | Method of assessment | a) talk (approx. 45 minutes) or b) term paper (5 to 10 pages) or c) project (10 to 15 pages) Assessment offered: Every two years, winter semester | | | | | | |
| Referred to in LPO I | § 22 II Nr. 2 f § 22 II Nr. 1 h | | | | | | | |
| 10-M-VHBDG-152-mo1 | Didactics of Geometry (virtual course) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | Ü (2) Course type: eLearning, mostly Virtuelle Hochschule Bayern (vhb) | | | | | | |
| | Method of assessment | project (web-based, 15 to 20 hours) Assessment offered: Once a year, summer semester | | | | | | |
| Referred to in LPO I | § 22 II Nr. 1 h) § 22 II Nr. 2 f) § 22 II Nr. 3 f) | | | | | | | |
| 10-M-VHBDA-152-mo1 | Didactics of Algebra (virtual course) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | Ü (2) Course type: eLearning, mostly Virtuelle Hochschule Bayern (vhb) | | | | | | |
| | Method of assessment | project (web-based, 15 to 20 hours) Assessment offered: Once a year, winter semester | | | | | | |
| Referred to in LPO I | § 22 II Nr. 1 h), § 22 II Nr. 2 f) § 22 II Nr. 3 f) | | | | | | | |
| 10-M-VH-BEx-152-mo1 | Exam Tutorial Didactics of Mathematics (virtual course) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | Ü (2) Course type: eLearning, mostly Virtuelle Hochschule Bayern (vhb) | | | | | | |
| | Method of assessment | project (web-based, 15 to 20 hours) Assessment offered: Once a year, winter semester | | | | | | |
| Referred to in LPO I | § 22 II Nr. 1 h) § 22 II Nr. 2 f) § 22 II Nr. 3 f) | | | | | | | |

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| 10-M-VHBMa1-152-mo1 | Mathematics 1 (virtual course) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | Ü (2) Course type: eLearning, mostly Virtuelle Hochschule Bayern (vhb) | | | | | | |
| | Method of assessment | project (web-based, 15 to 20 hours) Assessment offered: Every two years, winter semester | | | | | | |
| Referred to in LPO I | § 22 II Nr. 1 h) § 22 II Nr. 2 f) § 22 II Nr. 3 f) | | | | | | | |
| 10-M-VHBMa2-152-mo1 | Mathematics 2 (virtual course) | | | | | | | |
| | ECTS | 2 | Duration | 1 semester | Method of grading | (not) successfully completed | Modul level | undergraduate |
| | Courses | Ü (2) Course type: eLearning, mostly Virtuelle Hochschule Bayern (vhb) | | | | | | |
| | Method of assessment | project (web-based, 15 to 20 hours) Assessment offered: Every two years, summer semester | | | | | | |
| Referred to in LPO I | § 22 II Nr. 1 h) § 22 II Nr. 2 f) § 22 II Nr. 3 f) | | | | | | | |
| Paper (10 ECTS credits) | | | | | | | | |
| Preparation of a written Hausarbeit (thesis) in accordance with the provisions of Section 29 LPO I (examination regulations for teaching-degree programmes) is a prerequisite for teaching degree students to be admitted to the Erste Staatsprüfung (First State Examination). In accordance with the provisions of Section 29 LPO I, students studying for a teaching degree Mittelschule may write this thesis in the subject Didaktik einer Fächergruppe der Mittelschule (Didactics of a Group of Subjects of Mittelschule), in the subject they selected as Unterrichtsfach (subject studied with a focus on the scientific discipline) or in the subject Erziehungswissenschaften (Educational Science). Pursuant to Section 29 Subsection 1 Sentence 2 LPO I, students may also choose to write an interdisciplinary thesis. | | | | | | | | |
| 10-M-HMMSD-152-mo1 | Thesis in Mathematics as Didaktikfach (German Mittelschule) | | | | | | | |
| | ECTS | 10 | Duration | 2 semester | Method of grading | numerical grade | Modul level | undergraduate |
| | Courses | No courses assigned to module | | | | | | |
| | Method of assessment | Hausarbeit (thesis) pursuant to Section 29 LPO I (examination regulations for teaching-degree programmes) (250 to 300 hours) | | | | | | |
| Referred to in LPO I | § 29 | | | | | | | |