# **Examination regulations for the master's degree program**

# **Master of Biochemistry and Molecular Medicine**

# of the Faculty of Mathematics and Natural Sciences of the University of Cologne

#### from 27.06.2023

On the basis of § 2 paragraph 4 and § 64 of the Act on the Universities of the State of North Rhine-Westphalia (Higher Education Act-HG) in the version of the Higher Education Act (HZG NRW) of September 16, 2014 (GV.NRW. p. 547), last amended by Article 1 of the Act concerning the Membership of University Hospitals in the Employers' Association of the State of June 30, 2022 (GV. NRW. p. 780b), the Faculty of Mathematics and Natural Sciences of the University of Cologne issues the following regulations:

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**Attachments** 

#### § 1 Regulatory scope

<sup>1</sup>These examination regulations govern the course of study, the examination procedure and the academic degree to be awarded for the *Master of Biochemistry and Molecular Medicine* program at the University of Cologne. <sup>2</sup>The contents and requirements of the modules are regulated in the appendix. <sup>3</sup>The appendix is part of these examination regulations.

# § 2 Aim of study

Taking into account the requirements and changes in the professional world and the interdisciplinary references, teaching and studies provide students with the necessary professional knowledge, skills and methods according to the course of study in such a way that they are enabled to work scientifically, to apply scientific knowledge and methods in professional practice, to critically classify scientific knowledge and to act responsibly.<sup>1</sup>

# § 3 Academic degree

Upon successful completion of the program, the academic degree of Master of Science, M.Sc. is awarded.

# § 4 Access to Studies, Start of Studies, Standard Period of Study, Organization of Studies

- (1) Access and admission to the study program shall be governed by separate regulations.
- (2) <sup>1</sup> The study program can be started in the winter and summer semester. <sup>2</sup>The standard period of study is four semesters.
- (3)¹ The course of studies is organized by the Faculty of Mathematics and Natural Sciences in such a way that the studies can be completed within the standard period of study. ²On the part of the Faculty of Mathematics and Natural Sciences, adequate support for students in organizing their studies is ensured, among other things, through course-specific advising and through measures for evaluating and ensuring the quality of teaching.

<sup>&</sup>lt;sup>1</sup> Students acquire the necessary knowledge and competencies that enable them to practice good scientific practice and to act responsibly in science in accordance with the "Regulations of the University of Cologne for Ensuring Good Scientific Practice and for Dealing with Scientific Misconduct" (Official Notices of the University of Cologne 24/2011) as amended.

- (4)<sup>1</sup> A study plan is prepared and made available in a suitable form. <sup>2</sup>This study plan is not part of the examination regulations.
  - (5) The degree program is offered in English.

# § 5 Structure and organization of the study program

- (1) At least 120 credit points (LP) must be earned in the course of study in accordance with § 7.
  - (2)<sup>1</sup> The program includes 9 modules according to § 6.<sup>2</sup> In detail, it includes:
    - a) 8 modules with 6, 12 and 18 LP,
    - b) the Master's thesis module worth 36 credit points.
- (3) The course of study shall be conducted in accordance with the respective provisions in the appendix to these examination regulations.
- (4)¹ If one or more modules of another faculty are offered in the degree program, the regulations of the offering faculty apply to these. ²The modules concerned are shown in the appendix.

# § 6 Modules

- (1) The study program is structured in modules.
- (2)¹ Modularization is the combination of subject areas into thematically and temporally related, self-contained teaching units with credit points. ²The contents of a module are to be dimensioned in such a way that they can usually be taught within one semester or within two semesters. ³In particularly justified cases, a module may extend over more than two semesters.
- (3)<sup>1</sup> Modules usually have a scope of 6, 9, 12, 15 or 18 credit points. <sup>2</sup>Modules with 6 credit points can usually be completed in one semester, the others in a maximum of two semesters.
  - (4) A distinction is made between the following module types:
    - a) Core Modules serve to convey basic knowledge,
    - b) Advanced modules build on the basic modules and serve to deepen the acquired knowledge and skills,
    - c) Specialization Modules are used to define one's own focus through specialization,
    - d) Supplementary modules are not firmly anchored in the course of studies and serve to round off the studies individually.

- (5) Modules can be offered as compulsory or elective modules:
  - a) Compulsory modules are mandatory to study; they are identified as such in the appendix,
  - b) Elective modules are to be selected from a given list and studied on a compulsory basis in accordance with the provisions in the appendix; they are identified as such in the appendix.
- (6)¹ Regulations for the individual modules as well as for the examinations concluding them are named in the appendix. ²These include in particular:
  - a) Module identification number,
  - b) Title of the module,
  - c) Module Participation Prerequisites,
  - d) Start of the module,
  - e) Cycle of the module,
  - f) Duration of the module in semesters,
  - g) Course forms of the module and attendance requirements,
  - (h) Examination Requirements,
  - i) Form of examination, characteristics and duration of the module examination, examination elements, if applicable, and their passing and repetition modalities,
  - j) Exam language,
  - (k) Trial Restrictions,
  - I) Marking as compulsory or elective module
  - m) Credit points of the module,
  - n) Prerequisites for the award of credit points,
  - o) for elective modules: Proportion of the credit points of the module to the credit points in the relevant compulsory elective area,
  - p) Weighting of the module grade for the overall grade.
- (7)¹ As a rule, modules are completed with only one module examination. ²For modules with a scope of 6 credit points, the module examination consists of one examination element. ³In the case of modules worth 9 credit points, the module examination may consist of two examination elements. ⁴For modules of 12, 15 or 18 credit points, the module examination can consist of a maximum of three examination elements. ⁵Individual modules can also be completed without an examination. ⁶The corresponding regulations are shown in the appendix.
- (8) If a module examination is composed of several examination elements, these usually represent different forms of examinations or forms of examinations according to § 12 paragraph 2 to 6.
- (9)¹ Participation in modules or elements of modules may be subject to prerequisites. <sup>2</sup>The prerequisites are shown in the appendix.

## § 7 Credit Point System and General Criteria for the Award of Credit Points

- (1)¹ Successful participation in modules is certified by the award of credit points. <sup>2</sup>Credit points are calculated according to the expected workload required of the students and are a quantitative measure of the overall workload of the students. <sup>3</sup>They comprise the time spent both on attending courses and on preparing and following up the course material (attendance and self-study), preparing for examinations and the time spent on examinations, including final papers and student research projects and, if applicable, internships. <sup>4</sup>Credit points are equivalent to credits according to the European Credit Transfer and Accumulation System. <sup>5</sup>One credit point corresponds to an average workload of approximately 30 hours. <sup>6</sup>As a rule, 60 credit points are earned per academic year.
- (2)¹ Credit points are awarded if the study and/or examination achievements required in the respective module have been proven or passed. ²Section 48 (5) HG applies to the acquisition of credit points in the case of leaves of absence. ³Irrespective of this, study and examination achievements from modules that have not been completed can be shown in the Transcript of Records.

# § 8 unoccupied t

#### § 9 Courses

- (1) Courses are generally offered in the following forms:
  - a) Lecture: Coherent presentation and teaching of basic and specialized scientific knowledge and of methodological knowledge mostly in individual courses periodically distributed over a semester.
  - b) Seminar: Discursive study of fundamental or advanced questions.
  - c) Exercise: Course accompanying a lecture or seminar. Discussion of given exercises and deepening of learning content through independent work or acquisition and deepening of knowledge by working on tasks or conducting experiments.
  - d) Internship: Acquisition and deepening of knowledge by working on practical tasks or carrying out experiments. An internship can be carried out at the university (e.g. laboratory internship) or outside the university (e.g. field, company or school internship).
  - e) Excursion: Course outside the university for the purpose of observation. The students recognize aspects of subject content in reality, record relevant factors/structures on the basis of observations and practice the application of the acquired knowledge or work out scientific conclusions.
  - f) Language course: course designed for the acquisition and/or consolidation of foreign language skills.

- g) Project: Action-oriented, independent work on a complex task or problem in successive phases (planning, implementation, presentation of results), usually within a previously determined time.
- h) Tutorial: As a rule, this is an accompanying course to basic courses. In small groups, working techniques are practiced and basic knowledge is deepened; the complex contents of the main course are explained to the students or the theoretical contents are illustrated by means of practical examples.
- (2) The course forms according to paragraph 1 may be offered in combined form.
- (3)¹ If it is necessary to limit the number of participants in a course because of its nature or purpose or for other reasons of research, artistic development projects, teaching, the practice of art or the care of the sick, and if the number of applicants exceeds the capacity for admission, the number of participants may be limited in accordance with Section 59 (2) HG. <sup>2</sup>Priority shall be given to students whose studies require them to attend a course at that time. <sup>3</sup>The Faculty of Mathematics and Natural Sciences shall regulate the details, in particular the criteria for prioritization, in its own regulations. <sup>4</sup>Within the scope of the available resources, it is ensured that, as far as possible, students do not lose any time due to the restrictions on the number of participants.
- (4)¹ Admission to an examination or the award of credit points may require regular participation in courses in modules and their review. ²Corresponding provisions are shown in the annexes. ³The ordering of regular attendance is only permissible if it is proportionate and the learning objective can only be achieved through regular attendance. ⁴This is usually the case if at least one of the following reasons exists:
  - a) The obligation to demonstrable regular participation in modules or courses results from the initiation and practice of scientific discourse, which are the primary and formative element and essential learning objective of the module or course. Scientific discourse is characterized by the presentation of scientific issues and argumentation and one's own positioning as well as critical reflection and mutual exchange about what has been presented.
  - b) The obligation to demonstrable regular participation in modules or courses results from the didactic design of the course, which, in order to achieve the learning objective, provides for permanently participative, interactive and cooperative teaching and learning formats as well as reflection on the contents and results under guidance.
  - c) The obligation to provide evidence of regular attendance at modules or courses is prescribed by legal regulations.
  - d) The obligation to provide evidence of regular attendance at modules or courses is mandatory for reasons of occupational health and safety and laboratory safety.
  - e) The obligation for demonstrable regular participation in modules or courses arises from the need to acquire practical skills and abilities that cannot be acquired in any other way, as well as their testing, practice and reflection under guidance.

- f) The obligation for demonstrable regular participation in modules or courses arises from the need to practice sign language or oral or written language skills and abilities as well as their practical linguistic execution and reflection in the context of communicative and personal interaction under guidance.
- g) The obligation to demonstrable regular participation in modules or courses results from the necessity of examining content-relevant objects and contexts in situations and the location- and situation-dependent acquisition of practical or occupationally relevant skills and abilities with the inclusion of non-university learning locations.

<sup>5</sup>As a rule, regular attendance can be proven if the absences do not exceed 20%. <sup>6</sup>Particularly in the case of internships and excursions, this can be deviated from. <sup>7</sup>Corresponding regulations are shown in the appendices. <sup>8</sup>If attendance is compulsory, absences cannot be compensated by other work. <sup>9</sup>§ 17 paragraph 2 to 4 remains unaffected. <sup>10</sup>Regular participation in the courses as well as their preparation and follow-up is recommended.

# § 10 Academic advising, subject-specific academic advising, examination advising

- (1) Legally binding information on examination requirements and examination performance shall be provided by the chairperson of the examination board, his or her deputy, the head of the respective examination office and his or her deputy.
- (2)¹ The Central Academic Advising Office of the University of Cologne is available for general academic advising, especially about study opportunities and study requirements. ²Faculty-wide advising services are available for interdisciplinary study advising. ³The Counseling Center of the Center for Teacher Education is also available for interdisciplinary counseling in the teaching degree programs.
- (3)¹ The subject-specific course guidance is provided by the university lecturers and the academic staff involved in the training in this course of study during office hours. ²The office hours are announced by notice in the institutes and on the Internet. ³The use of individual study counseling is recommended.
- (4) The General Student Committee (AStA) and the Student Council offer consultations on general questions of study organization.
- (5) The Department 9: International Affairs of the University of Cologne as well as the Center for International Relations (ZiB) of the Faculty of Mathematics and Natural Sciences offer consultations for the special questions of foreign students and for the preparation of a study abroad.
- (6) In the case of study-related personal difficulties, the Psycho-Social Counseling Service of the Cologne Student Union can be called upon above all.
- (7) Students with disabilities or chronic or mental illness may seek the advice of the university administration (Service Center Inclusion) as well as the representative for students with disabilities or chronic illness.

## § 11 Recognition of services

- (1)¹ Examination results obtained in study courses at other state or state-recognized universities, at state or state-recognized universities of cooperative education or in study courses at foreign state or state-recognized universities or in another study course at the same university shall be recognized in their entirety upon application, provided that with regard to the competencies acquired there is no significant difference to the results which are being replaced; an examination of equivalence shall not take place. ²The same shall apply with regard to degrees with which courses of study within the meaning of sentence 1 have been completed. ³Recognition within the meaning of sentences 1 and 2 shall serve the purpose of continuing studies, taking examinations or commencing further studies. ⁴Failed examinations shall only be recognized to such an extent that all repetition options pursuant to Section 20 (1) have not already been exhausted.
- (2)¹ On application, knowledge and qualifications acquired by means other than study may be recognized on the basis of documents submitted if such knowledge and qualifications are equivalent in content and level to the examination achievements they are intended to replace. ²Pupils who, in the consensual judgment of the school and the university, display special talents may, in individual cases, be admitted to courses and examinations as young students outside the enrollment regulations. ³Their study and examination achievements will be recognized upon application for subsequent studies.
- (3)¹ If achievements are recognized, the grades are to be adopted and included in the calculation of the overall grade, insofar as the grading systems are comparable. ²In the case of incomparable grading systems, the remark "passed" shall be included. ³A marking of the recognition in the certificate of examination achievements is permissible.
- (4)¹ Recognition of a performance achieved elsewhere is not possible if this performance has already been successfully achieved at the University of Cologne. ²This also applies if this performance has not yet been evaluated.
- (5)¹ Students must submit the documents required for recognition. ²Applications for recognition must be submitted in writing or electronically. ³The chairperson of the examination board decides on the recognition. ⁴As a rule, subject representatives are to be heard during the recognition procedure. ⁵As a rule, the decision must be made within three months and the student must be notified immediately by posting the recognition information in the campus management system; reasons for the rejection of recognition must be given in writing or electronically. ⁶If recognition sought on the basis of an application within the meaning of paragraph 1 is refused, the person making the application may request a review of the decision by the rectorate, without prejudice to procedural deadlines. ⁶The rectorate shall make a recommendation to the chairperson of the examination board on the further handling of the application.

# § 12 Forms of examination

(1) Modules are generally completed with only one module examination, which is based on the learning objectives and learning outcomes defined for the module.

- (2)¹ Module examinations can be taken in written, oral, practical or combined form. ²The form of examination must be suitable for testing the learning objectives and learning outcomes conveyed in the module and for demonstrating that the examination candidate has mastered the contents and methods of the module in the essential contexts and can apply the acquired knowledge and skills. ³The form and duration or workload of the respective examination performance are shown in detail in the appendix. ³For serious reasons, the chairperson of the examination board may determine a different form of examination upon written or electronic application. ⁴Examinations can also be conducted in the form of a video conference at the suggestion of the examiners and with the consent of the examination candidate.
  - (3) Expressions of the written examination form are usually:
    - a) Written examination: A written examination is a piece of work to be completed under personal supervision or electronic supervision (video supervision), in which specified tasks are to be completed alone and independently using only the approved aids. The duration of a written exam is usually a minimum of 45 and a maximum of 180 minutes and is specified for the respective exam in the appendix. Examinations can be conducted in written or electronic form. For examinations in electronic form, the regulations in paragraph 8 shall apply in addition. Examinations may also be conducted in whole or in part in the form of an answer-choice procedure in accordance with § 13.
    - b) Term paper: A term paper is an independent written elaboration of a given topic that has been dealt with in the context of the relevant module. It must be submitted in written or electronic form as well as a file on a readable data carrier in a format specified by the examiner; in exceptional cases, submission in electronic form is sufficient. A declaration with the following wording must be attached to the term paper: "I hereby certify that I have written this paper independently and without the use of any aids other than those specified. All passages that have been taken verbatim or in spirit from published and unpublished writings are identified as such. I assure that the submitted electronic version corresponds completely to the submitted print version.". In the case of electronic submission only, the last sentence is to be deleted.
    - c) A take-home-exam is the independent written processing of one or more examination tasks within a specified examination time. A take-home-exam can be conducted in written or electronic form.
    - d) An internship report is a written account and analysis of the tasks completed in an internship within or outside the university. An internship report may be written or electronic.
    - d) A portfolio is a collection of several completed tasks of different types, which serves to document and reflect on the learning process and is evaluated in summary. A portfolio may be kept in written or electronic form....
    - e) A poster presentation is a condensed large-format textual and/or pictorial presentation of scientific research results, methods and findings on a scientific question and can be carried out in written or electronic form. It serves to document and reflect on the learning process and is accompanied by an oral presentation of results and findings, which may be conducted in whole or in part by electronic communication.

- (4) Expressions of the oral examination form are usually:
  - a) Oral examinations: In oral examinations, an examination candidate shall demonstrate that he or she recognizes the interrelationships of the examination area and is able to classify special questions in these interrelationships. Oral examinations are conducted by at least two examiners or by one examiner in the presence of an expert assessor. As a rule, an oral examination lasts a minimum of 20 and a maximum of 45 minutes per examination candidate and may be conducted in whole or in part by electronic communication. Duration, essential course as well as subjects and results are to be recorded in a protocol. Examination candidates of the same degree program shall be allowed to participate in oral examinations as listeners upon request, unless an examination candidate objects. The examiner decides on the application according to the number of seats available. Participation does not extend to the discussion and announcement of the examination result.
  - b) Presentation: A presentation serves to present a given topic or subject in a limited amount of time. The examination takes place within the framework of a course in the form of a lecture with the aid of suitable presentation techniques. A presentation can be carried out in whole or in part in electronic communication.
  - c) Lecture: In the context of a lecture, independently developed aspects or perspectives of a subject area are presented in a limited time with the aid of suitable presentation techniques. A lecture can be carried out completely or partially in electronic communication.
- (5) Expressions of the practical examination form are usually: setting up and conducting experiments as well as examinations in which an extra-textual product is created.
  - (6)¹ Combined examinations generally comprise different forms of examination that are suitable for testing the acquisition of different types of competences. ²As a rule, combined examinations include workplace-based assessments, simulations, presentations with a written paper, papers with a lecture, business games, project work and poster presentations:
    - a) A Workplace-based Assessment is an unfinished collection of assessment instruments suitable for conducting observation of behavior (procedures, communication, etc.) in vivo or electronic communication and providing qualified feedback. The examination instruments are mostly used formatively. For this purpose, participants work together in groups to which different goals or interests, are assigned. Assessments can be competitive (enforcing a group's solution) or cooperative (finding a solution together). In addition to knowledge, assessments test planning-strategic and communicative competencies in dealing with and using technical knowledge in application scenarios. The concrete implementation of the assessment as well as the criteria for the evaluation will be explained to the participants in advance. The scope results from the workload, which is shown in the appendix.
    - b) A simulation is a test of complex real-life competencies or skills and abilities in vivo or electronic communication, carried out by means of suitable models or actors. The examinations can be conducted as individual examinations or in series (as so-called objective-structured examinations). The documentation of the examination

performance is carried out on special documentation sheets (so-called checklists) by one examiner per station. The duration of the examination is determined by the workload shown in the appendix.

- c) A simulation game is a complex scenario with realistic and at the same time open problems that have to be solved. The solutions are not defined in advance, but are the result of planning, negotiations, strategies, tactics and decisions. The scope results from the workload, which is shown in the appendix.
- d) A project work is the independent processing of a task or a problem in a group or by an individual from the planning to the execution to the documentation of the result in written, oral, electronic or other form. Processing time and scope result from the workload, which is shown in the appendix.
- e) A poster presentation is a condensed large-format textual and/or pictorial presentation of scientific research results, methods, and findings related to a scientific question and may be conducted in written or electronic form. [Specific requirements may be anchored here]. It serves to document and reflect on the learning process and is accompanied by an oral presentation of results and findings, which may be conducted in whole or in part by electronic communication. Duration and extent of the poster presentation result from the workload, which is shown in the appendix.
- (7) In appropriate cases, examinations may also be conducted as group work or as oral group examinations at the discretion of the examiner, provided that the individual contribution of each individual group member is clearly identifiable, clearly distinguishable and assessable.
- (8) <sup>1</sup> When announcing the examination date in accordance with Section 15 (5), the examiners shall determine whether the examination will be conducted in person or (partially) in electronic form and whether the examination in electronic form will be accompanied by video supervision. <sup>2</sup>If there are serious reasons, a different form of examination (electronic or faceto-face) can be determined after the date of the examination has been announced in consultation with the responsible examination board, provided that this does not put the candidates at a disadvantage when taking their examinations. <sup>3</sup>In the case of an examination conducted in electronic form, the examination candidates shall be given sufficient opportunity before the examination to familiarize themselves with the electronic information and communication systems used in the respective examination. <sup>4</sup>With regard to the provisions of data protection law as well as the implementation of video supervision, the regulations of the Regulations Governing Online Examinations and Video Supervision of the University of Cologne, as amended from time to time, shall apply with the exception of § 5 paragraph 4 sentences 1 and 2.
- (9)¹ Disruptions in the examination process must be asserted immediately in writing or electronically to the chairperson of the examination committee or to the responsible examiner. <sup>2</sup>The assertion is excluded at the latest if more than three working days have elapsed since the performance of the examination.

# § 13 Examinations in the answer-choice procedure

- (1)¹ An examination in the answer-choice procedure exists if the minimum performance of the examination candidate required for passing the examination can be achieved exclusively by marking or assigning the given answers. <sup>2</sup>Examinations or examination questions in the answer-choice procedure are only permissible if they are suitable for providing evidence that the examination candidate has mastered the contents and methods of the module in the essential contexts and can apply the acquired knowledge and skills.
- (2)<sup>1</sup> The examination questions must be unambiguously understandable, free of contradictions, unambiguously answerable and suitable for determining the knowledge of the examination candidates to be tested in accordance with paragraph 1 sentence 2. <sup>2</sup>Iterations of the same examination questions (including answer options) are permissible. <sup>3</sup>The deduction of points within an examination task is not permitted.
- (3) If the examiner according to the faculty- or course-specific design of the concrete answer-choice procedure is not at the same time the task setter, but the examiner's activity is shifted from the examiner responsible according to the examination regulations to another, namely the task setter, the following paragraphs 4 to 9 shall additionally apply.
- (4)¹ The examiner selects the examination material, formulates the questions, determines the answer options and draws up the evaluation rules and the evaluation scheme in accordance with paragraph 6.² The requirements for passing the examination are to be determined in advance. ³Before the examination, the examiner conducts a review process in which the content and form of the questions are proofread by a second examiner.
- (5)¹ The examiner can also create a pool of equivalent examination questions from which the examination candidates each receive different examination questions to answer. ²The assignment is done by random selection. ³The equivalence of the examination questions must be ensured.
- (6)¹ The examination is passed if the examination candidate has achieved at least 60 percent of the total achievable points. ²If the overall average of the points achieved in an examination minus 12 percent of the overall average is below 60 percent but above 50 percent of the total achievable points, the pass limit shall be calculated in accordance with this sliding clause. ³A grading scheme that exclusively sets an absolute pass mark is not permitted.
- (7)<sup>1</sup> The examination performances are to be evaluated as follows: If the minimum number of attainable points required to pass the examination has been achieved, the grade shall be as follows.

"very good" if at least 75 percent,

"good" if at least 50 but less than 75 percent,

"satisfactory" if at least 25 but less than 50 percent,

"sufficient" if none or less than 25 percent

of the points attainable beyond this have been achieved. <sup>2</sup>When calculating the scores, 0.5 values are interpreted in favor of the examination candidate. <sup>3</sup>If the minimum number of points required to pass the examination has not been achieved, the grade will be "deficient (5.0)".

- (8)¹ If the assessment of examination performance reveals a conspicuous accumulation of errors in the answers to individual examination tasks, the examiner shall review the examination tasks concerned without delay and before the announcement of the examination results to determine whether they are defective when measured against the requirements pursuant to paragraph 2 sentence 1. ²The tasks shall be analyzed post hoc. ³Difficulty index, discriminatory power index, reliability and distractor analysis provide indications of the quality of the questions set. ⁴If the review reveals that individual examination tasks are faulty, these are to be reassessed or not taken into account when determining the examination result. ⁵The number of examination items to be taken into account in determining the examination result is reduced accordingly. ⁶The reduction in the number of examination papers after publication of the results may not be to the disadvantage of an examination candidate. ⁵If the number of points attributable to the examination tasks to be eliminated exceeds 20 percent of the total achievable points, the examination as a whole must be repeated. ⁵This also applies if only part of an examination performance is to be achieved by the answer-choice method.
- (9) If an examination performance consists only partially of examination tasks in the answer-choice procedure, this paragraph, with the exception of paragraph 8, sentences 7 and 8, applies only to the examination part created in the answer-choice procedure.

# § 14 Language of examination

Module examinations and, if applicable, their examination elements are usually conducted in English.

# § 15 Registration and admission to examinations

- (1)¹ Prior to admission to a module examination, it is checked whether a candidate is entitled to take the examination. ²Admission to and taking of a module examination shall be granted if the examination candidate is enrolled in the relevant degree program at the University of Cologne or is admitted as a second student, has registered for the respective module examination in due time according to paragraph 4 and, if applicable, fulfills further requirements according to paragraph 2 and there is no reason for refusal according to paragraph 3.
- (2)¹ Admission to a module examination may be linked to proof of certain prerequisites. ²If these prerequisites are coursework, they serve the acquisition of competencies and the assessment of learning status for teachers and students. ³They remain ungraded. ⁴If course work requires attendance at a course for which regular attendance is not required in accordance with § 9, paragraph 4, students shall, in justified exceptional cases, be allowed to take an alternative course work that does not require attendance at the course, provided that this is suitable for promoting the acquisition of competencies and for assessing learning levels

in a comparable manner. <sup>5</sup>Course credit is generally provided in the following formats: Electronic learning assessments, essays, exercises, homework, short papers, logs, reviews, test exams, thesis papers, and similar formats. <sup>6</sup>The respective requirements for admission to a module examination are shown in the appendix.

- (3)¹ Admission to a module examination is to be denied if the prerequisites according to paragraph 1 or paragraph 2 are not fulfilled, if the module examination in the same or an equivalent module eligible for recognition has already been passed at the University of Cologne, or if a deadline for repetition has been missed. ²Admission to a module examination shall also be denied if the examination candidate has definitively failed an examination required by the examination regulations or has lost the right to take the examination in the chosen course of study at a university within the area of application of the Basic Law; this shall apply accordingly to courses of study which have a considerable proximity in terms of content to the previous course of study. ³In addition, admission to an examination shall be denied if an examination candidate has been granted leave of absence pursuant to Section 48 (5) HG, unless one of the exceptional cases specified in Section 48 (5) sentence 4 and sentence 5 HG applies.
- (4)¹ Registration in the campus management system is required for each module examination; without registration, there is no entitlement to participation in or assessment of the examination performance. ²As a rule, registration for a module examination must take place no later than six weeks before the examination date. ³Notwithstanding this, § 20 paragraph 7 applies.
- (5)¹ The examination dates must be announced at the beginning of the lecture period, but no later than nine weeks before the examination date, by posting or on the Internet in a suitable form. ²Notwithstanding this, the following applies: In the case of oral module examinations, the examination periods must be named at the beginning of the lecture period and the specific date at the latest two weeks before the module examination. ³Students who have been admitted to a module examination are entitled to attend a published examination date, except in cases of force majeure. ⁴Notwithstanding this, § 20 paragraph 7 shall apply.
- (6) At least three prompt examination dates are offered for the completion of an examination performance.
- (7) Students who are enrolled in more than one degree program at the same time and who wish to take a module examination that is a component in more than one of these degree programs must specify in which degree program they are taking the module examination when registering for this module examination.

# § 16 Deregistration, default and withdrawal from examinations

(1)¹ The deadlines for withdrawal from the module examinations shall be announced by the chairperson of the examination board at least nine weeks before the examination date by posting a notice or on the Internet in a suitable form. ²As a rule, an examination candidate may withdraw from the module examination no later than two weeks before the respective examination date without giving reasons.

- (2)¹ If an examination candidate does not take part in a module examination set in terms of time and place without a valid reason, or if he or she withdraws from the module examination without a valid reason after it has begun, the examination performance shall be deemed to have been assessed as "deficient (5.0)" or "failed". ²The same applies if an examination performance is not completed within the specified processing time. ³If an examination is conducted electronically, the examination performance shall only be deemed to have been completed if the electronic transmission to the responsible office has been fully completed by the end of the processing time.
- (3)¹ If an examination candidate fails to take part in a module examination or withdraws from the module examination after it has begun, the chairperson of the examination board may, if there are valid reasons, refrain from grading the examination performance as "unsatisfactory (5.0)" or "failed". ²The same applies if an examination performance is not completed within the specified processing time. ³The reasons asserted for the default or withdrawal must be notified to the chairperson of the examination board immediately in writing or electronically and must be made credible. ⁴In case of illness, a medical certificate must be submitted. ⁵In cases of doubt, the submission of a confidential medical certificate may be requested; the costs will be borne by the university. ⁶The same applies in the case of proven illness of a child to be cared for by an examination candidate or a spouse to be cared for, a registered partner, a relative in the direct line as well as a relative by marriage in the first degree.

# § 17 Compensation for disadvantages and protective provisions

- (1) The special concerns of students with disabilities, chronic or mental illnesses, and students who are subject to maternity protection regulations shall be taken into account in order to ensure their equal opportunities.
- (2) <sup>1</sup> If an examination candidate can credibly demonstrate that he or she is unable to participate in a module examination in the intended form or to the intended extent due to long-term or permanent illness or disability, he or she will be granted compensation for a disadvantage upon written or electronic application to the chairperson of the examination committee. <sup>2</sup>The submission of a specialist medical certificate may be required for this purpose. <sup>3</sup>This applies accordingly with regard to deadlines and dates as well as obligations to participate in courses and academic achievements.
- (3)¹ The use of the protection provisions according to the maternity protection regulations as well as according to the time limits of the Federal Parental Benefit and Parental Leave Act (Bundeselterngeld- und Elternzeitgesetz) in the respective valid version are made possible upon application; in these cases, taking module examinations is possible despite the leave of absence. ² If an examination candidate can credibly demonstrate that she cannot participate in a module examination in the intended form or to the intended extent due to the maternity protection regulations, she will be granted compensation for disadvantages upon written or electronic application to the chairperson of the examination committee. ³For this purpose, the submission of a specialist medical certificate may be required. ⁴This applies accordingly with regard to deadlines and dates as well as obligations to participate in courses and academic achievements. ⁵The application must be made immediately after the conditions have arisen.

- (4)¹ Special concerns arising from the need for care or maintenance of the spouse, the registered partner, a relative in the direct line or a relative by marriage in the first degree shall be taken into account appropriately, in particular with regard to deadlines and dates as well as obligations to attend courses. ²The application must be submitted immediately after the prerequisites have occurred.
- (5)¹ The applications according to paragraphs 1 to 4 are to be comprehensively justified by the examination candidate with appropriate evidence. ²Applications must be submitted to the chairperson of the examination board within a reasonable period of time prior to the performance of the service. ³ Unless a change in the illness or disability is to be expected, the compensation for disadvantages should extend to all examinations to be taken in the course of the studies as well as the acquisition of participation requirements.

# § 18 Evaluation of examination results

- (1)<sup>1</sup> Examination performances are graded by the examiners or assessed as "passed" or "failed". <sup>2</sup>The following grades are to be used:
  - 1 = very good: an excellent performance;
  - 2 = good: a performance significantly above the average requirements;
  - 3 = satisfactory: a performance that meets average requirements;
  - 4 = sufficient: a performance that still meets the requirements despite its shortcomings;
  - 5 = defective: a performance that no longer meets the requirements due to significant defects.
- <sup>3</sup>By lowering or raising the individual grades by 0.1, intermediate values are formed for differentiated assessment. <sup>4</sup>The grades 0.9 and below; 4.1 to 4.9 and 5.1 are excluded. <sup>5</sup>An examination performance is passed if it has been graded "sufficient (4.0)" or better or has been assessed as "passed".
- (2)¹ The Master's thesis and the colloquium associated with it, as well as examinations for which no compensation is possible in the event of a final failure, shall be assessed by two examiners; the appointment shall be made by the chairperson of the examination board. ²If a graded examination performance is evaluated by two examiners, the grade of the examination performance results from the arithmetic mean of the two individual evaluations. ³If, in the case of written examinations based on the two-examiner principle, the difference between the individual grades is more than 1.0 grade level or if only one of the two individual grades is "unsatisfactory (5.0)", the chairperson of the examination committee shall appoint a third examiner. ⁴In this case, the grade is calculated from the arithmetic mean of the three individual grades. ⁵If the average is worse than "sufficient (4.0)", the examination performance is to be assessed as "sufficient (4.0)" if two individual assessments are "sufficient (4.0)" or better. ⁶If two individual evaluations are "insufficient (5.0)", the examination performance is to be evaluated as "insufficient (5.0)", deviating from the arithmetic mean.

- (3) If a written examination that is graded "pass" or "fail" is graded by two examiners, the chairperson of the examination board shall appoint a third examiner to determine the final grade if the two examiners' grades differ.
- (4)¹ In the case of combined forms of examination in accordance with § 12 Paragraph 6, an overall assessment of the examination performance takes place. ²In the case of grading, the grade is shown in accordance with paragraph 1.
- (5)¹ If a module examination consists of several examination elements, the assessment is carried out in accordance with the provisions shown in the appendix. ²All examination elements of the module examination assessed as "deficient (5.0)" or "failed" must be repeated. ³Paragraphs 1 to 3 apply accordingly to examination elements.

### (6) unoccupied

- (7)¹ The overall grade of the degree program is calculated as the weighted arithmetic mean of the module grades and the grade of the master's thesis according to the weighting shown in the appendix. ²The preliminary overall grade of the degree program is calculated as the weighted arithmetic mean of the existing grades of the successfully completed or recognized modules. ³ If more modules are completed than specified in these examination regulations, the passed examinations from the compulsory modules and the passed examinations from compulsory elective and elective modules are used to calculate the overall grade in chronological order according to the examination date stored in the campus management system. ⁴The remaining passed compulsory elective and elective modules are shown as additional examinations on the Transcript of Records.
- (8) Grades are shown with one decimal place and are used as a basis for further calculations in this form; all further decimal places are deleted without rounding.
  - (9) Scores, which are averaged values, are:

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from 1.0 to 1.5 = very good;
from 1.6 to 2.5 = good;
from 2.6 to 3.5 = satisfactory;
from 3.6 to 4.0 = sufficient;
above 4.0 = poor.
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#### § 19 Announcement of the examination results

(1)¹ The grading of examination performances is generally announced to the examination candidates within eight weeks by posting the grading information in the campus management system. ²If this regulation is deviated from, the reasons must be made part of the record. ³The result of an oral examination performance is communicated to the examination candidate following the examination.

(2) The notification of the final failure of an examination or of a failed Master's thesis will be formally sent to the examination candidate at the postal address stored in the campus management system or electronically and will be accompanied by instructions on how to appeal.

# § 20 Repetition of module examinations

- (1)¹ Failed module examinations may be repeated. ²The number of examination attempts per module may be limited to three, notwithstanding the provisions of § 21 (12). ³Further details are regulated by the provisions in the appendix. ⁴With regard to all modules of the Master's program in which the number of examination attempts is limited to three, there are a total of two additional examination attempts. ⁵In addition, examination candidates who have earned at least 90 credit points receive one additional examination attempt. ⁶If an examination has not been passed after exhaustion of the two additional examination attempts and, if applicable, the further examination attempt according to sentence 5, the course of study has been definitively failed with the consequence of exmatriculation from the course of study. <sup>7</sup>The additional examination attempts according to sentences 4 and 5 do not refer to the repetition of the Master's thesis.
- (2)<sup>1</sup> If an examination candidate has failed a module examination for which the number of examination attempts pursuant to Paragraph 1 Sentence 2 is limited to three for the third time, the chairperson of the examination board shall notify the candidate in writing or electronically whether it is possible to take additional examination attempts for this examination pursuant to Paragraph 1 Sentences 4 and 5.
- (3) The following applies to additional examination attempts in compulsory elective modules: If an examination candidate has failed a module examination in a compulsory elective module for which the number of examination attempts is limited to three in accordance with Paragraph 1 Sentence 2 for the third time, additional examination attempts must be taken in the same compulsory elective module.
- (4) Additional examination attempts can only be granted for a module examination if none of the examination attempts in the module in question was failed due to deception or a breach of regulations pursuant to § 24.
- (5)¹ Before taking a first additional examination attempt according to paragraph 1, it is strongly recommended to take advantage of counseling opportunities. ²For this purpose, the examination candidate receives a written or electronic invitation to counseling, which also provides information about the available counseling options.
- (6) If a module examination is composed of several examination elements, the repeat options pursuant to § 18 (5) shall apply. :
- (7) In the case of repeat examinations, the chairperson of the examination board may, at the request of the examiner, specify a different form of examination or different characteristics of the respective form of examination.

- (8) In the case of repeat examinations, the deadlines pursuant to Section 15 (4) and (5) may be deviated from in justified cases.
- (9) The repetition of a Master's thesis shall be carried out in accordance with § 21 paragraph 12.
  - (10) The repetition of passed module examinations is excluded.

### § 21 Master thesis module

- (1)¹ The Master's thesis is an examination in the form of an independently written piece of work, which is intended to show that the examination candidate is able to scientifically work on and reflect on a thematically limited problem from the subject area of the degree program using the required methods within a specified period of time. ²When registering for the Master's thesis, the examination candidate must specify an area of study in which the Master's thesis will be written.
- (2)<sup>1</sup> The Master's thesis is written during the course of study. <sup>2</sup>36 credit points are awarded for the master thesis module. <sup>3</sup>The requirements for admission to the master's thesis are shown in the appendix.
  - (3) unoccupied
- (4)¹ The chairperson of the examination committee commissions an examiner to set the topic of the Master's thesis in accordance with § 23 Paragraph 3 and appoints a further examiner for a second assessment; in exceptional cases justified by the subject matter, for example in the case of Master's theses carried out externally, a third examiner may be appointed. 

  The examination candidate has the right to propose the examiner. 
  The topic is communicated to the examination candidate in writing or electronically by the chairperson of the examination committee, stating the deadline by which the Master's thesis must be submitted at the latest. 
  The date of issue of the topic is to be recorded. 
  The topic can be returned once within two weeks of issue.
- (5)¹ The processing time for the master's thesis is a maximum of 6 months starting with the issue of the topic. ²The content and scope of the Master's thesis topic must be such that it can be completed within the period specified in sentence 1. ³Upon justified written or electronic application, the chairperson of the examination board may grant a grace period of a maximum of four weeks; the application must be submitted to the examination office before the deadline expires. ⁴Such an individual case is deemed to exist in particular if there is a considerable restriction of performance relevant to the examination, which must be proven, or in the case of circumstances which considerably impair the examination candidate in taking the examination, for which he or she is not responsible and which are directly linked to the content of the Master's thesis. ⁵The decision on the existence of a justified individual case is the responsibility of the chairperson of the examination committee. ⁵In the case of a decision in accordance with sentence 5, last half-sentence, the chairperson shall hear the topic proposer before making a decision.

- (6) The Master's thesis must be written in English.
- (7)¹ The provisions of good scientific practice apply to the preparation of the master's thesis. ²The master's thesis may not have been submitted in the same or similar form as part of another examination. ³If this is violated, the thesis is considered to have been assessed as "deficient (5.0)". ⁴ The decision is made by the examination board.
- (8)<sup>1</sup> The master thesis contains a list of the aids used. <sup>2</sup>In addition, it must be accompanied by a declaration with the following wording: "I hereby declare in lieu of an oath that I have written this thesis independently and without the use of other than the stated aids. <sup>3</sup>All passages taken verbatim or in spirit from published and unpublished writings are identified as such. <sup>4</sup>The work has not yet been submitted in the same or similar form as part of another examination. <sup>5</sup>I assure that raw data, data analyses, experimental protocols or sample material are secured according to the principles of good scientific practice and are accessible to the head of the working group in which the master's thesis was carried out." <sup>6</sup>If the affirmation in lieu of an oath was made falsely, the legal consequences according to the Criminal Code may apply.
- (9)¹ The master's thesis must be submitted in due time in triplicate two printed and firmly bound copies and one read-only electronic version to the responsible examination office; the date of submission must be recorded on file. ²If the Master's thesis is not submitted on time, it is considered to have been graded "deficient (5.0)".
- (10)¹ The master's thesis must be submitted in due time in electronic form (exclusively PDF/A) to the responsible examination office; the date of submission must be recorded on file. ²If the Master's thesis is not submitted on time, it is considered to have been graded "unsatisfactory (5.0)". ³At the request of the examiner, a paper version identical to the electronic version must also be submitted to the examiner for assessment purposes; the student must affirm in lieu of an oath that the paper version is identical to the electronic version of the Master's thesis. ⁴The paper version is for assessment purposes only and is not part of the examination file.
- (11)¹ The assessment of the Master's thesis will be announced to the examination candidate as a rule within eight weeks after submission of the thesis by posting the assessment information in the campus management system. ²If this regulation is deviated from, the reasons are to be put on record.
- (12)¹ A master's thesis graded "deficient (5.0)" or deemed deficient can be repeated once with a new topic in the same field of study. ²A change of study area is possible for the remaining attempt upon written application to the examination board. ³The requirements for the Master's thesis in this field of study must be fulfilled. ⁴ The provisions according to § 24 paragraph 1 remain unaffected. ⁵The application for repetition must be made within 2 months. ⁶A second repetition of a failed master thesis is excluded. ⁵If a Master's thesis is not passed after one repetition, the course of study is definitively not passed. ⁵The repetition of a passed master thesis is excluded.
- (13)¹ The notice of failure of the Master's thesis will be formally sent to the examination candidate by the chairperson of the examination committee to the postal address stored in the campus management system or electronically. ²The decision shall be accompanied by instructions on how to appeal.

(14)¹ The master thesis module includes a final colloquium. ²This will only take place if the master's thesis has been passed. The examination office will inform the candidate of the date for the colloquium within 4 weeks after receipt of the expert opinions of the Master's thesis. ³If a 3rd expert opinion is required, the date of receipt of the 3rd expert opinion is decisive. ⁴In justified exceptional cases, the examination board may allow exceptions to these deadlines upon application by the examination candidate. ⁵The grading of the colloquium is carried out by all reviewers of the Master's thesis on the day of the colloquium as the arithmetic mean of the individual evaluations. ⁶The overall grade of this module results from the weighted arithmetic mean of the evaluations of the written master thesis (weight 75%) and the colloquium (weight 25%). ⁶The colloquium may be conducted in whole or in part by electronic communication. ³Listeners from the same department are admitted, provided the examination candidate does not object. ⁴Admission does not extend to the discussion and announcement of the examination result. ¹⁰A failed colloquium can be repeated once.

# § 22 Audit committee

- (1)<sup>1</sup> For the study program regulated by these regulations, the Narrow Faculty of the Faculty of Mathematics and Natural Sciences elects an Examination Board. <sup>2</sup>The examination board is responsible for all modules regulated by these regulations. <sup>3</sup>In the case of polyvalent modules, it shall take into account the regulations of the offering faculty or department.
  - (2) The Audit Committee shall be composed of the following 7 voting members:
    - 1. the chairperson from the group of university professors,
    - 2. 3 further members from the group of university teachers,
    - 3. 1 member from the group of academic employees,
    - 4. 1 member from the group of employees in technology and administration,
    - 5. 1 member from the group of students.
- (3) The Audit Committee shall elect a deputy for the chairperson from among the members pursuant to paragraph 2 no. 2.
- (4)¹ One deputy shall be elected for each of the members pursuant to paragraph 2 nos. 2 to 5. ²The deputies shall act if the members from the relevant group are prevented from attending.
- (5) The Chairperson may invite other persons, in particular deputy members, to attend meetings of the Audit Committee, provided that this appears to be appropriate and the majority of the voting members present do not object.
- (6)¹ The members and their deputies pursuant to paragraph 2 nos. 2 to 5 shall be elected by the restricted faculty separately according to groups. ²The groups shall have a right of nomination. ³The members from the group of university professors, from the group of academic employees and from the group of employees in technology and administration shall be elected for three years, the members from the group of students for one year. ⁴Re-election is permitted.

<sup>5</sup>The term of office of an alternate member ends with the term of office of the corresponding member. <sup>6</sup>If a member or a deputy pursuant to paragraph 2 nos. 2 to 5 retires prematurely, a successor shall be elected for the remaining term of office.

- (7)¹ The Audit Committee constitutes a quorum if the chairperson or his/her deputy and at least 2 other voting members are present. ²If the Vice Chairperson chairs a meeting because the Chairperson is prevented from attending, his or her Vice Chairperson or Vice Chairperson shall attend the meeting as a voting member in accordance with Paragraph 4. ³ The Audit Committee shall pass resolutions by a simple majority of those present who are entitled to vote. ⁴In the event of a tie, the chairperson shall have the casting vote. ⁵The members of the examination board from the group of employees in technology and administration shall only have voting rights in matters of teaching insofar as they hold corresponding functions in the university and have special experience in the respective area; such experience is to be assumed in particular if the employee fulfills the examiner status according to § 65 paragraph 1 sentence 2 HG. ⁶The chairperson shall decide on the existence of these requirements at the beginning of the member's term of office and, in cases of doubt, the rectorate. <sup>7</sup>The members from the student group shall only vote on pedagogical-scientific decisions, in particular on the recognition of examination achievements as well as on related appeal decisions, if they fulfill the examiner status according to § 65 paragraph 1 sentence 2 HG.
- (8)¹ The examination board shall ensure that the provisions of these regulations, including their annexes, are observed. ²In particular, it decides on admissions to examinations, the proper conduct of examinations, the appointment of examiners and assessors, withdrawals from examinations, cheating and irregular behavior, objections to assessments of examination performance, decisions on compensation for disadvantages and protective provisions, invalidation of examination performance and revocation of degrees. ³It reports to the Faculty of Mathematics and Natural Sciences on an ad hoc basis on the development of the examination system in the degree program and, if necessary, makes suggestions for amendments to these regulations within the framework of quality assurance. ⁴Provisions of these regulations concerning the responsibility of the chairperson of the examination board remain unaffected.
- (9)¹ The meetings of the Audit Committee are not public. ²The chairperson may decide that the meeting shall be held by electronic communication. ³The decision shall become invalid if half of the members of the Audit Committee object to it before the meeting. ⁴In the case of meetings held by electronic communication, the chairperson may also decide that resolutions are to be passed by electronic communication; this may be deviated from by a resolution of the body. ⁵Paragraph 7 sentence 1 shall apply to meetings by electronic communication with the proviso that "present" shall mean participating in the meeting. ⁶Resolutions may also be adopted by circular resolution provided that no member objects. ⁵The members and their deputies shall be bound by official secrecy. ⁵If they are not in public service, they must be sworn to secrecy by the chairperson.
- (10)¹ The members of the examination board and their deputies have the right to be present at examinations. ²The right to be present does not extend to the discussion of the examination result.
- (11) The Examination Office shall be available to the Examination Committee for the organizational handling of the examination procedures.

- (12)¹ The chairperson of the Audit Committee, or his/her deputy if the chairperson is prevented from doing so, shall represent the Audit Committee, convene the meetings of the Audit Committee, chair these meetings and implement the resolutions passed there. ²The Audit Committee may delegate the performance of its duties to the Chairperson for all regular cases. ³In case of urgency, the chairperson may conduct a vote by circular resolution. ⁴He or she may take decisions that cannot be postponed instead of the examination board; the examination board must be informed of this without delay; the latter may rescind the decision; rights of third parties that have already arisen shall remain unaffected. ⁵Decisions on appeals are reserved for the examination board. ⁶Minutes shall be taken for each meeting of the Examination Committee.
- (13) The chairperson of the Examination Committee shall announce orders, the setting of dates and deadlines, and other communications of the Examination Committee that do not only affect individual persons with legally binding effect by posting notices or by other suitable means.

# § 23 Examiners, assessors, electronic verification

- (1)¹ Examiners are appointed from the group of university professors and from among the members and affiliates of the Faculty of Mathematics and Natural Sciences in accordance with § 65 paragraph 1 HG. ²Examination performances may only be evaluated by persons who themselves possess at least the qualification to be determined by the examination or an equivalent qualification. ³Retired examiners may be reappointed as examiners for a period of one year after the end of the semester in which they left the University of Cologne. ⁴Only those who have obtained a relevant degree at least at master's level or an equivalent qualification at a university may be appointed as assessors.
- (2)¹ The examination board appoints the examiners and the assessors. ²It may delegate the appointment to the chairperson. ⁴The appointment of examiners and assessors shall be recorded in the records. ⁴Notwithstanding the provision in sentence 1, the following shall apply: A lecturer shall be the examiner for the course for which he or she is responsible and which he or she conducts, unless the examination board appoints a different examiner.
- (3)¹ The chairperson of the examination board appoints the examiners responsible for the Master's thesis from among the professors, associate professors, honorary professors, junior professors and private lecturers. ²In justified exceptional cases, the Examination Committee decides on the appointment of further examiners who fulfill the requirements according to § 65 paragraph 1 HG. ³It may delegate the appointment to the chairperson. ⁴Examiners who have left the University of Cologne may be reappointed as examiners for the Master's thesis for a period of one year after the end of the semester in which they left. ⁵The examination board may extend this period upon justified application. ⁶It may delegate this decision to the chairperson. ¬University lecturers from a university linked by a partnership or cooperation agreement may be appointed as topic examiners for a Master's thesis upon justified application by the university lecturers representing a subject. <sup>8</sup>The appointment of examiners for the Master's thesis must be recorded in the files.

- (4)¹ The examiners shall specify the working materials and aids permitted for the examinations they conduct and shall announce these in a suitable manner in good time, at the latest when the examination date for the respective examination is announced. ²If no agreement can be reached, the examination board shall decide.
- (5)¹ Examiners are independent of instructions in their examination activities. ²They and, if applicable, the assessors are subject to official secrecy. ³If they are not in public service, they must be sworn to secrecy by the chairperson of the examination board.

# § 24 Deception, breach of order

- (1)¹ If an examination candidate attempts to influence the assessment of an examination performance by deception for his/her own or another's advantage, if he/she carries aids not permitted in the examination or if he/she commits scientific misconduct in the performance of the examination, he/she commits an act of deception. ²Non-approved aids can be confiscated by the invigilators after completion of the examination, which the examination candidate is entitled to terminate, with the consent of the examination candidate for the purpose of preserving evidence.
- (2)¹ Depending on the severity of the act of cheating according to Paragraph 1, the Examination Committee shall pronounce one of the following sanctions against the examination candidate:
  - a) a warning;
  - b) the examination candidate is ordered to repeat the examination performance to which the act of cheating relates;
  - c) the examination performance to which the act of deception relates shall be deemed to have been assessed as "deficient (5.0)" or "failed",
  - d) the examination to which the act of deception relates is declared definitively failed;
  - e) the examination candidate is excluded from taking further examinations, as a result of which the examination entitlement in the degree program expires.

<sup>2</sup>A serious violation can be considered in particular in cases of the use of unauthorized aids, the (attempted) exertion of influence on the examiner or, in cases of plagiarism, in which sources are deliberately concealed by reformulating the original texts, rearranging the syntax or using synonyms. <sup>3</sup>A particularly serious case can be considered in particular in the case of an elaborate use of technical aids such as internet-capable cell phones, in the case of repeated acts of deception in different examinations, in the case of the organized collaboration of several persons, in the case of the adoption of an entire work of another person as one's own performance, the falsification of scientific work or the sabotage of examination work and the research activities of others. <sup>4</sup> The sanction chosen will be noted in the examination file. <sup>5</sup>In the case of combinatorial, inter-faculty or inter-university study programs, further examination offices, faculties or universities may be informed of this.

- (3)¹ If there is an initial suspicion of plagiarism in a study or examination performance, the Examination Committee may have further checks carried out, in particular with the aid of plagiarism detection software, even without the express consent of the examination candidates. ²For this purpose, the submission of an electronic version of the performance may also be requested subsequently. ³Storage in databases of the plagiarism detection software beyond the end of the respective assessment procedure requires the express consent of the student. ⁴Consent must be given voluntarily and is not a requirement for exam registration, submission, or evaluation. ⁵The result of the review will be stored as part of the examination file.
- (4) As a consequence of an act of deception in accordance with Paragraph 1, the relevant course work shall be deemed not to have been completed.
- (5)¹ Anyone who disturbs the performance of an examination can be warned by the respective examiners or invigilators. ²If the warnings are ineffective or if the disruption is serious, the examination candidate may be excluded from further performance of the examination. ³ In this case, the examination committee may assess the examination performance as "deficient (5.0)" or "failed". ⁴The reasons for the exclusion shall be recorded in the records.
- (6)<sup>1</sup> Before a decision is made by the examination board, the examination candidate must be given a legal hearing. <sup>2</sup>The examination candidate must be informed of the decision in writing without delay, the reasons for the decision must be given and the decision must be accompanied by instructions on how to appeal.
- (7)¹ In addition, administrative offence proceedings may be initiated in accordance with Section 63 (5) HG. ²It is also a misdemeanor to intentionally attempt to influence the result of an examination to someone else's advantage.

### § 25 Invalidity of examination results, revocation of the Master's degree

- (1)¹ If the requirements for admission to an examination were not met without the candidate intending to deceive, and if this fact only becomes known after the certificate has been issued, this defect shall be remedied by passing the examination. ²If the examination candidate has intentionally obtained admission unlawfully, the examination board shall decide on the legal consequences, taking into account the provisions of the Administrative Procedure Act of the State of North Rhine-Westphalia (VwVfG NRW).
- (2) If an examination candidate has cheated in an examination performance and this fact only becomes known after the certificate has been issued, the Examination Committee may subsequently withdraw the assessment for that examination performance in the performance of which the examination candidate has cheated, subject to the requirements of § 48 VwVfG NRW, and impose a sanction in accordance with § 24 appropriate to the seriousness of the cheating.
- (3) The Master's degree may be revoked if it is found to have been obtained by deception or if essential requirements for the award have been erroneously considered to have been met.

- (4)¹ The examination candidate must be given the opportunity to comment before a decision is made in accordance with paragraphs 1 to 3. ²The examination board is responsible for the decision, and it shall make its decision in compliance with the provisions of the Administrative Procedure Act of the State of North Rhine-Westphalia (VwVfG NRW). ³A decision is excluded after a period of five years from the date of the certificate.
- (5)¹ The incorrect certificate as well as all incorrect attachments will be confiscated and, if necessary, reissued. ²If the study program as a whole has been declared failed, the academic degree shall be withdrawn by the Faculty of Mathematics and Natural Sciences and the Master's certificate shall be confiscated.

# § 26 Examination file, inspection of files

- (1)¹ An examination file is kept by the examination board for each examination candidate. 

  2The examination file documents in particular the examination attempts, the examination papers, the related opinions of the examiners, the examination protocols, the examination results, grade calculations and copies of the certificates and diplomas. 

  3The examination file is kept in writing or in full or in part electronically.
- (2) An examination candidate may inform himself/herself about the status of the examination results at any time within the scope of organizational possibilities.
- (3)¹ After the announcement of an examination result, each examination candidate or his or her authorized representative shall be granted access, upon written or electronic request, to his or her written performance in this examination and the related reports and correction notes of the examiners as well as to the minutes of oral examinations. ²Within the scope of this inspection, the examination candidate or his or her authorized representative must be given the opportunity to make either copies or photographs of the documents; any sample solutions that may have been issued may not be copied or photographed since they are not part of the examination candidate's examination file. ³The further procedure for inspection, including an appropriate deadline for the inspection request, is regulated by the examination board. ⁴After expiry of the specified deadlines, inspection is generally only possible if an examination candidate is demonstrably not responsible for missing the deadline. ⁵As a rule, there is no further right to information.
- (4)¹ The examination file shall be kept until the end of the fifth year following exmatriculation from this degree program and then offered to the responsible archive; if the archive refuses to accept it, it must be destroyed. ²The academic degrees awarded and a cataloged collection of the certificates and diplomas awarded may be kept in a register until the end of the fiftieth year following the completion of the course of study; sentence 1, second half-sentence applies accordingly.
- (5)<sup>1</sup> Examination questions, correction notes and examiners' reports of which a student becomes aware may not be passed on to third parties or published if they are protected by copyright. <sup>2</sup>The thesis prepared by a student may only be published with the corresponding consent if a blocking notice has been agreed. <sup>3</sup>This is without prejudice to justified interests in legal protection, for example in the form of disclosure to a commissioned lawyer.

## § 27 Degree and graduation documents

- (1)¹ The study program is successfully completed when all required examination achievements have been passed and the credit points according to § 5 have been acquired. ²A certificate is issued for the successful completion of the study program. ³The certificate is signed by the chairperson of the examination board. ⁴Grades are indicated in words and numerically. ⁵It is issued with the date of the day on which the last examination performance was rendered or recognized. ⁶If the Master's thesis is the last examination performance, the date of submission applies.
- (2)<sup>1</sup> Together with the certificate, the student will receive the Master's degree certificate, which certifies the award of the degree according to § 3; this certificate bears the date of the certificate. <sup>2</sup>The Master's certificate is signed by the Dean of the Faculty of Mathematics and Natural Sciences and by the Chairperson of the Examination Committee and bears the seal of the Faculty.
- (3)¹ Together with the certificate and the Master's degree certificate, a Diploma Supplement is issued in German and English, which provides information on the subject profile of the completed degree program and the academic and professional qualifications acquired with the degree. ²It also contains a grade table, which allows the relative classification of the overall grade in the examination results in the degree program. ³The grade point average is formed as follows: Used grades from the best to the weakest passing grade and the number of passing grades awarded in the reference group are indicated; the percentage per grade level in relation to the total passing grades awarded and the cumulative percentage of passing grades awarded are indicated. ⁴The Diploma Supplement also describes the degree program completed and provides information about the faculty. ⁵Part of the Diploma Supplement is the English Transcript of Records.
- (4)¹ If a student has not passed or has definitively failed the course of study or has dropped out, or if he or she is changing universities, a certificate (Transcript of Records) will be issued to him or her upon request, showing the examinations taken, the supplementary studies and achievements, the grades and the credit points earned. ²If applicable, it must indicate that the studies have not been passed or have been definitively failed.

# § 28 Transitional provisions

- (1) These regulations apply to all students who have been enrolled for the first time or after an interruption for the first time in the master's degree program regulated by these regulations or who have been admitted as second students at the University of Cologne as of the winter semester 2023/24.
- (2)¹ On October 1, 2023, students already enrolled in the master's degree program in Biochemistry at the University of Cologne or students admitted as second students may continue their studies according to these regulations while having their previous examination results recognized. <sup>2</sup>The change must be applied for in writing or electronically to the chairperson of the examination board and cannot be reversed.

(3) The examination board shall ensure that credit points already earned in modules that change in type or scope or are omitted can continue to be used to complete the degree program.

# § 29 Publication and entry into force

- (1) These regulations shall be published in the Official Notices of the University of Cologne.
- (2) These Regulations shall enter into force with effect from October 1, 2023. § Section 28 shall remain unaffected.

Issued on the basis of the resolutions of the Narrow Faculty of the Faculty of Mathematics and Natural Sciences of 20.04.2023 and after examination of the legality by the Rectorate of 13.06.2023.

Cologne, 27.06.2023

The Vice Dean for Research of the Faculty of Mathematics and Natural Sciences of the University of Cologne University Professor Dr. Alga Zuccaro

# Appendix 1: Specific Regulations for the Master's Degree Program *Biochemistry and Molecular Medicine of* the Faculty of Mathematics and Natural Sciences of the University of Cologne

**Explanation**: The program is divided into

- two core modules with 6 credit points each Lecture Series Advanced Biochemistry and Molecular Medicine and Methods Seminar Hot Topics in Biochemistry and Molecular Medicine.
- three Advanced Modules two Subject Modules with 12 credit points each and the module "Scientific Writing" with 6 credit points
- three specialization modules, two of them with 18 credit points each (Laboratory Project Module), one specialization module with 6 credit points (Project Proposal Module)
- the **specialization module Master's thesis with final colloquium** with a total of 36 credit points.

The basic and advanced modules should preferably be completed in the first two semesters. The first three focus modules should preferably be completed in the 2nd and 3rd semester. The module Master's thesis with final colloquium should complete the degree program.

Kenn num- ber of the mo- dule	Title of the module	Module type	Module Participation Requirements	Start / Cycle / Duration of the module	Course forms, attendance requirements (TP, maximum absence) <sup>3,4,5</sup>	Examination requirements	Examination elements (PE)   Type of examination (and weighting)   Duration   Prerequisite for the award of credit points (LP allocation) Language: English	Test restriction	Compulsory elective (WP) / compulsory	Credit points of the module	Weighting of the module grade for the overall grade
MN-BC- BCMM	Lecture Series Ad- vanced Biochemistry and Molecular Medicine	Basic module	none	Start: WiSe Cycle: annual Duration: 15 weeks <sup>1</sup>	Lecture and tutorial	none	Examination elements: 1 Type of examination: Written exam (100%) Duration: 2 hours (written exam) LP award: Passing of the PE	none	Φ	6	10%
MN-BC-HT	Methods Seminar Hot Topics in Biochemistry and Molecular Medicine	Basic module	none	Start: SoSe Frequency: annual Duration: 5 weeks <sup>1</sup>	Seminar (TP, 20%) <sup>3</sup>	none	Examination elements: 1 Exam type: Term paper (100 %) Duration: 2 weeksLP Award: Pass PE	none	Р	6	5%
MN-BC-SM (type BC1)	Subject Module <sup>2</sup>	Advanced mo- dule	none	Start: WiSe/SoSe Cycle: biannual Duration: 7 weeks <sup>1</sup>	Lecture; Internship (TP, 20%) <sup>3</sup> ; Se- minar (TP, 20%) <sup>3</sup>	none	Examination elements: 2 Type of examination: Written exam (50%); presentation (50%) Duration: 60 min written exam 20-30 min (presentation) LP award: Passing of all PE	3	WP	12	Jew. 10%
MN-BC-SM (type BC2)	Subject Module <sup>2</sup>	Advanced mo- dule	none	Start: WiSe/SoSe Cycle: biannual Duration: 7 weeks1	Lecture; Internship (TP, 20%) <sup>3</sup> ; Se- minar (TP, 20%) <sup>3</sup>	none	Examination elements: 2 Exam type: Written exam (70%); presentation (30%) Duration: 60 min written exam 20-30 min (presentation) LP award: Passing of all PE	3	WP	12	Jew. 10%
MN-BC-SM (Type BC3)	Subject Module <sup>2</sup>	Advanced mo- dule	none	Start: WiSe/SoSe Cycle: biannual Duration: 7 weeks <sup>1</sup>	Lecture; Internship (TP, 20%) <sup>3</sup> ; Se- minar (TP, 20%) <sup>3</sup>	none	Examination elements: 2	3	WP	12	Jew. 10%

			C				Type of examination: written exam (50%); poster presentation (50%) Duration: 60 min written exam 1 week poster creation and 20-30 min poster presentation LP award: Passing of all PE				
MN-BC-SM (type BC4)	Subject Module <sup>2</sup>	Advanced mo- dule	none	Start: WiSe/SoSe Cycle: biannual Duration: 7 weeks <sup>1</sup>	Lecture; Internship (TP, 20%) <sup>3</sup>	none	Examination elements: 2 Type of examination: Oral examination (50%); Internship report (50%) Duration: 20-30 min (oral exam); internship report 1 week LP award: Passing of all PE	3	WP	12	Jew. 10%
MN-BC-SM (type BC5)	Subject Module <sup>2</sup>	Advanced module	none	Start: WiSe/SoSe Cycle: biannual Duration: 7 weeks <sup>1</sup>	Lecture; Internship (TP, 20%) <sup>5</sup> ; Se- minar (TP, 20%) <sup>3</sup>	none	Examination elements: 3 Type of examination: Written exam (50%); Unit (25%); Internship report (25%) Duration: 60 min (written exam), 20-30 min (presentation), internship report 1 week LP award: Passing of all PE	3	WP	12	Jew. 10%
MN-BC-SM (type BC6)	Subject Module <sup>2</sup>	Advanced mo- dule	none	Start: WiSe/SoSe Cycle: biannual Duration: 7 weeks1	Lecture; Internship (TP, 20%) <sup>3</sup> ; Se- minar (TP, 20%) <sup>3</sup>	none	Examination elements: 3 Type of examination: Written exam (50%); presentation (25%); poster (25%) Duration: 60 min written exam, 20-30 min (presentation), 1 week poster preparation and 20-30 min poster presentation LP award: Passing of all PE	3	WP	12	Jew. 10%
MN-BC-SM (Type BC7)	Subject Module <sup>2</sup>	Advanced mo- dule	none	Start: WiSe/SoSe Cycle: biannual Duration: 7 weeks <sup>1</sup>	Lecture; Internship (TP, 20%) <sup>3</sup> ; Se- minar (TP, 20%) <sup>3</sup>	none	Examination elements: 3 Type of examination: oral examination (50%); presentation (25%); Internship report (25%) Duration: 20-30 min (oral exam), 20-30 min (presentation), internship report 1 week LP award: Passing of all PE	3	WP	12	Jew. 10%
MN-BC-SM (type BC8)	Subject Module <sup>2</sup>	Advanced mo- dule	none	Start: WiSe/SoSe Cycle: biannual Duration: 7 weeks <sup>1</sup>	Lecture; Internship (TP, 20%) <sup>3</sup> ; Se- minar (TP, 20%) <sup>3</sup>	none	Examination elements: 3 Type of examination: oral examination (50%); presentation (25%); Poster (25%)	3	WP	12	Jew. 10%

							Duration: 20-30 min (oral exam), 20-30 min (presentation), 1 week poster preparation and 20-30 min poster presentation.  LP award: Passing of all PE				
MN-BC-SW	Scientific Writing	Advanced mo- dule	none	Start: WiSe/SoSe Cycle: biannual Duration: 3 weeks <sup>1</sup>	Seminar (TP, 20%) <sup>3</sup> , Exercise (TP, 20%) <sup>4</sup>	Seminar, progress report	Examination elements: 1 Exam type: Term paper (100%) Duration: 2 weeks LP award: Passing of all PE	none	Р	6	5%
MN-BC-LM	Laboratory Module <sup>7</sup>	Focus module: Laboratory mo- dule	Successful participation in at least one Subject Mo- dule	Start: all year Duration: 12 weeks <sup>1</sup>	Project (TP, 20%) <sup>5</sup> , Seminar (TP, 20%) <sup>3</sup>	none	Examination elements: 2 Type of examination: presentation(30%); Internship report (70%) Duration 20-30 min (presentation), internship report 2 weeks LP award: Passing of all PE	3	Т	18	10%
MN-BC-PP	Project Proposal	Focus module: Project description	Successful participation in all modules with the exception of the Master's Thesis and one other module.	Start: all year Duration: 4 weeks <sup>1</sup>	Project work	none	Examination elements: 1 Exam type: Term paper (100%) Duration: 4 weeks LP award: Passing of all PE	none	P	6	5%
MN-BC-MT	Master Thesis and De- fense Module <sup>6</sup>	Focus module: Master thesis (MA) and final colloquium (AK)	Successful completion of all other mo- dules in the program.	Start: all year Duration: 6 months <sup>1</sup>	Project ⁵		Examination elements: 2 Exam type: Master's thesis (75%); Final colloquium (25 %) Duration: Master thesis 6 months; 45 min final colloquium LP award: Passing of all PE	2 (MA) 3 (AK)	Р	36	35%

<sup>&</sup>lt;sup>1</sup> Preparation time before the start of the module is not included in the "duration".

<sup>&</sup>lt;sup>2</sup> A list of elective modules will be announced each semester.

<sup>&</sup>lt;sup>3</sup> The obligation for verifiable regular participation in courses with seminar results according to § 9 paragraph 4 sentence 4 a) and b)

<sup>4</sup> The obligation to provide evidence of regular participation in courses with exercises arises in accordance with § 9 paragraph 4 sentence 4 e).

The obligation to provide proof of regular participation in courses with a project arises in accordance with § 9 Paragraph 4 Sentence 4 e). Furthermore, according to § 9 paragraph 4 d) the participation in safety instructions is obligatory.

<sup>6</sup> The Master Thesis module consists of the Master Thesis worth 30 credit points (duration 6 months) and a final colloquium worth 6 credit points (preparation time 4 weeks).

<sup>&</sup>lt;sup>7</sup> Both modules may not be taken with the same person authorized to conduct the examination.

# Appendix 2. study plan for the master program *Biochemistry and Molecular Medicine of* the Faculty of Mathematics *and* Natural Sciences.

### Start of study winter semester

Semester	Module	Number of audit elements Audit performance	Credit Points
1	Advanced Biochemistry and Molecular Medicine (basic module)	1, written exam	6
	Subject Module 1 (Advanced module)	2-31, seminar, internship report, exam/oral exam	12
	Subject Module 2 (Advanced module)	2-3 <sup>1</sup> , seminar, internship report, exam/oral exam	12
2	Hot Topics in Biochemistry and Medicine (basic module)	1, Homework	6
	Scientific Writing (Advanced module)	1, Homework	6
	Laboratory Project 1 (Focus Module)	2, Internship report and presentation	18
3	Laboratory Project 2 (Focus Module)	2, Internship report and presentation	18
	Project Proposal (Focus Module)	1, Homework	6
4	Master Thesis & Defense	2, Master thesis and final colloquium	36
		Examination elements: 12-14 (plus master thesis and final colloquium) <sup>1</sup>	Total number of credit points: 120

<sup>1</sup> The number of examination elements depends on the selected Subject Module. These exist in a form with 2 and in a form with 3 examination elements

# Start of study **summer semester**

Semester	Module	Number of audit elements Audit performance	Credit Points
1	Hot Topics in Biochemistry and Medicine (basic module)	1, Homework	6
	Subject Module 1 (Advanced module)	2-3 <sup>1</sup> , seminar, internship report, exam/oral exam	12
	Subject Module 2 (Advanced module)	2-31, seminar, internship report, exam/oral exam	12
2	Advanced Biochemistry and Molecular Medicine (basic module)	1, written exam	6
	Scientific Writing (Advanced module)	1, Homework	6
	Laboratory Project 1 (Focus Module)	2, Internship report and presentation	18
3	Laboratory Project 2 (Focus Module)	2, Internship report and presentation	18
	Project Proposal (Focus Module)	1, Homework	6
4	Master Thesis & Defense	2, Master thesis and final colloquium	36
		Examination elements: 12-14 (plus master thesis and final colloquium) <sup>1</sup>	Total number of credit points: 120

<sup>&</sup>lt;sup>1</sup> The number of examination elements depends on the selected Subject Module. These exist in a form with 2 and in a form with 3 examination elements