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Only the German language version of the examination regulations is legally binding. The English translation has not been linguistically nor legally corrected and is only a machine translation as information for our English speaking students.

Examination Regulations for the Master's Programme in Chemistry of the Faculty of Mathematics and Natural Sciences of the University of Cologne

September 21st 2020

On the basis of § 2 paragraph 4 and § 64 of the Higher Education Act of the State of North Rhine-Westphalia (Hochschulgesetz-HG) in the version of the Higher Education Act (Hochschulzukunftsgesetz - HZG) of 16 September 2014 (GV.NRW. p. 547) last amended by Article 10 of the Act on the Consistent and Solidary Management of the COVID-19 Pandemic in North Rhine-Westphalia and on the Adaptation of State Law with Regard to the Effects of a Pandemic of 14 April 2020 (GV. NRW. p. 218b), the Faculty of Mathematics and Natural Sciences has issued the following regulations:

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§ 1 Regulatory Area

These examination regulations govern admission, the course of study, the examination procedure and the academic degree to be awarded for the Master's degree programme in Chemistry at the University of Cologne. The contents and requirements of the modules are regulated in the annexes. The annexes are part of these examination regulations.

§ 2 Study Objective

Taking into account the requirements and changes in the professional world and the interdisciplinary references, the teaching and studies impart to the students the necessary subject-specific knowledge, skills and methods according to the degree programme in such a way that they are enabled to carry out scientific or artistic work, to apply scientific knowledge and methods in professional practice, to critically classify scientific knowledge and to act responsibly. The students acquire the necessary knowledge and competences that enable them to exercise 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. Students undertake to comply with the principles of good scientific practice and to act responsibly.

§ 3 Academic degree

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

§ 4 Admission to the programme, commencement of studies, standard period of study, organisation of studies

(1) Only those students may participate in the Master's degree programme in Chemistry who

a) possess a certificate of successful completion of the Bachelor's degree programme in Chemistry at the University of Cologne or an equivalent degree or an academic qualification recognised as equivalent by the Examination Committee (§ 22),

b) has provided proof of special aptitude in a procedure in accordance with the respective regulations (Annex I), and

c) is registered for this degree programme at the University of Cologne or is admitted as a secondary student pursuant to § 52, section 2 HG.

(2) The degree programme may be commenced in the winter and summer semesters. The standard period of study is four semesters.

(3) The course of study is organised by the Faculty of Mathematics and Natural Sciences in such a way that the degree programme can be completed within the standard period of study. On the part of the Faculty of Mathematics and Natural Sciences, adequate support of the students in organising their studies is ensured, among other things, by course-specific counselling and by measures for the evaluation and assurance of the quality of teaching.

(4) A study plan shall be drawn up and made accessible in a suitable form. This study plan is not part of the examination regulations.

(5) The degree programme shall be offered in English.

§ 5 Organisation and structure of the degree programme

(1) In the course of study, 120 credit points (LP) shall be acquired in accordance with § 7.

(2) The programme comprises 11 modules according to § 6. In detail, it includes:

a) Three A-modules (Advanced Modules, 6 credit points each), three E-modules (Experimental Modules, 9 credit points each), three P-modules (Project Modules, two with 12 credit points each, one with 15 credit points, the latter with a Research Proposal), 1 S-module (Supplementary Module with 6 credit points).

b) the module Master's thesis (with Master's colloquium) with a total of 30 credit points.

(3) The study programme shall be carried out in accordance with the respective provisions in Annex II of these Examination Regulations.

§ 6 Modules

(1) The degree programme is modularly structured.

(2) Modularisation is the combination of subject areas into thematically and temporally related, self-contained teaching units with credit points. The contents of a module shall be dimensioned in such a way that they can usually be taught within one semester or within two semesters. In particularly justified cases, a module may extend over more than two semesters.

(3) As a rule, modules have a scope of 6, 9, 12, 15 or 18 credit points. 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 impart basic knowledge,

b) Advanced Modules build on the Core Modules and serve to deepen the acquired knowledge and skills,

c) Specialisation modules serve to define one's own focus through specialisation,

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 must be studied; they are shown as such in Annex II,

b) compulsory elective modules shall be selected from a given list and shall be studied on a compulsory basis in accordance with the provisions in Annex II; they shall be designated as such in Annex II,

(6) Regulations on the individual modules as well as on the examinations concluding them shall be named in Annex II. These include in particular:

(a) identification number of the module,

b) title of the module,

c) module participation requirements,

d) start of the module,

e) Cycle of the module,

f) Duration of the module in semesters,

g) Course forms of the module and participation obligations,

h) examination requirements,

i) examination form, characteristics and duration of the module examination, examination elements, if applicable, and their passing and repetition modalities,

j) examination language,

- k) examination restrictions,
- l) identification as compulsory or elective module,
- m) credit points of the module,
- n) Prerequisites for the award of credit points,
- o) for compulsory 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) As a rule, modules are completed with only one examination. For modules with a scope of 6 credit points, the module examination shall consist of one examination element. For modules with a scope of 9 credit points, the module examination may consist of two examination elements. For modules worth 12, 15 or 18 credit points, the module examination can consist of a maximum of three examination elements. Individual modules can also be completed without examinations. In total, the maximum number of module examinations and examination elements is 15; this number does not include the Master's thesis. The corresponding regulations are shown in Annex II.

(8) If a module examination consists of several examination elements, these usually represent different forms of examinations or forms of examination according to § 12, paragraphs 2 to 6.

(9) Participation in a module, its assigned courses and module examinations requires registration for this module. The deadlines for module registrations shall be communicated to the students in a suitable form in good time. Participation in modules or elements of modules may be linked to prerequisites. The prerequisites are shown in Annex II.

§ 7 Credit point system and general criteria for awarding credit points

(1) Successful participation in modules shall be certified by the award of credit points. 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. They comprise the time required both for attending the courses and for preparing and following up the course material (attendance and self-study), the preparation for examinations and the examination work, including final papers and seminar papers as well as internships, if applicable. Credit points are equivalent to credits according to the European Credit Transfer and Accumulation System. One credit point corresponds to an average workload of approximately 30 hours. As a rule, 60 credit points are acquired per academic year.

(2) Credit points are awarded if the study and examination achievements required in the respective module have been proven or passed. Section 48, paragraph 5 HG applies to the acquisition of credit points in the case of leave of absence. Irrespective of this, study and examination achievements from modules which have not been completed may be shown in the Transcript of Records.

§ 8 vacant

§ 9 Types of courses

(1) Courses are generally offered in the following forms:

a) Lecture: Coherent presentation and imparting of basic and specialised scientific knowledge and methodological knowledge, usually in individual events 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 carrying out 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. as a field, company or school internship).

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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 period of time.

h) Tutorial: As a rule, a course accompanying basic courses. Working techniques are practised in small groups 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) 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 and teaching, and if the number of applicants exceeds the capacity of admission, the number of participants may be limited in accordance with section 59(2) HG. In this case, students who are dependent on attending a course at that time in their studies shall be given priority. The faculty shall regulate the details, in particular the criteria for prioritisation, in its own regulations. Within the scope of the available resources, it shall be ensured that, as far as possible, students do not lose any time due to the restrictions on the number of participants.

(4) Examinations may require regular participation in the courses of a module. 2 Corresponding provisions are shown in Annexes I and II. § Section 17, paragraphs 1 to 5 shall apply accordingly. Regular participation in the courses and 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/her deputy, the head of the respective examination office and his/her deputy.

(2) The Central Student Advisory Service of the University of Cologne shall be available for general student advisory services, in particular concerning study options and study requirements. Faculty-wide counselling services are available for interdisciplinary study counselling. The Counselling Centre of the Centre for Teacher Education is also available for interdisciplinary counselling in the teacher training programmes.

(3) The subject-related study counselling is carried out by the university professors and academic staff involved in the education in this study programme during office hours. The office hours are announced by notices in the institutes and on the internet. The use of individual study counselling is recommended.

(4) The General Student Committee (AStA) and the Chemistry Student Council offer counselling on general questions concerning the organisation of studies.

(5) The Department 9: International Affairs of the University of Cologne as well as the Centre for International Relations (ZiB) of the Faculty of Mathematics and Natural Sciences offer counselling for 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 Counselling Service of the Cologne Student Union can be called upon.

(7) Students with disabilities or chronic or mental illness can make use of the counselling services of the University Administration (Service Centre Inclusion) and the representative for students with disabilities or chronic illness.

(8) Each student shall be assigned a university lecturer as mentor. The mentor's task is, in particular, to provide individual counselling during the course of study.

§ 11 Recognition of achievements

(1) Examination results obtained in degree programmes at other state or state-recognised institutions of higher education, at state or state-recognised universities of cooperative education or in degree programmes at foreign state or state-recognised institutions of higher education or in another degree programme at the same institution of higher education shall be recognised on application, provided that there is no significant difference between the acquired competences and the achievements which are being replaced; an examination of equivalence shall not take place. The same shall apply with regard to degrees with which courses of study within the meaning of sentence 1 have been completed. Recognition within the meaning of sentences 1 and 2 shall serve the purpose of continuing studies, taking examinations, taking up further studies or admission to doctoral studies. Failed examinations shall only be recognised to such an extent that all repetition options pursuant to § 20, paragraph 1, have not already been exhausted.

(2) On application, knowledge and qualifications acquired by means other than study may be recognised 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. Pupils who, in the consensual judgement of the school and the university, display special talents may, in individual cases, be admitted to courses and examinations as young students outside the enrolment regulations. Upon application, their academic and examination achievements shall be recognised for subsequent studies.

(3) If achievements are recognised, the grades shall be accepted and included in the calculation of the overall grade, provided the grading systems are comparable. In the case of incomparable grading systems, the note "passed" shall be included. A marking of the recognition in the certificate of examination achievements is permissible.

(4) Recognition of a performance achieved elsewhere is not possible if this performance has already been successfully achieved at the University of Cologne.

(5) Students shall submit the documents required for the recognition of the performance to be recognised. Applications for recognition must be submitted in writing or electronically. The chairperson of the examination board shall decide on the recognition. As a rule, subject representatives shall be heard during the recognition procedure. As a rule, the decision must be made within three months and the student must be informed immediately by posting the recognition information in the campus management system; reasons must be given in writing for the rejection of recognition. If the recognition sought on the basis of an application within the meaning of paragraph 1 is refused, the applicant may apply for a review of the decision by the rectorate, without prejudice to procedural deadlines. The rectorate shall make a recommendation to the body responsible for deciding on recognition as to how to proceed with the application.

§ 12 Forms of examination

(1) As a rule, modules shall be concluded with a module examination based on the learning objectives and learning outcomes defined for the module.

(2) Module examinations may be taken in written, oral, practical or combined form. The form and duration of the respective examination performance are shown in detail in Annex II. For serious organisational reasons, the chairperson of the examination board may determine a deviating or supplementary form of examination upon written application.

(3) As a rule, the written form of examination is:

a) Written examination: A written examination is a piece of work to be completed under supervision, in which given tasks are to be worked on alone and independently using only the approved aids. The duration of a written examination is usually at least 45 and at most 180 minutes and is specified for the respective examination in Annex II. . Written examinations may be conducted in written or electronic form. For examinations in electronic form, the regulations in Paragraph 8 shall apply in addition. 3Examinations 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 was dealt with within the framework of the module in question. It is to be submitted in written form and 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 is to be attached to the term paper: "I hereby affirm that I have written this paper independently and without the use of other than the stated aids. All passages taken verbatim or in spirit from published and unpublished writings are marked as such. I assure that the submitted electronic version corresponds completely to the submitted printed version."

c) An internship report is a written account and analysis of the tasks completed in an intra- or extra-university internship.

d) A portfolio is a collection of several completed tasks in the broadest sense, which serves to document and reflect on the learning process and is assessed in summary.

(4) Forms of oral examinations are generally:

a) Oral examinations: In oral examinations, an examination candidate shall demonstrate that he or she recognises the interrelationships of the examination area and is able to classify specific 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 at least 20 and at most 45 minutes per examination candidate. Duration, essential course as well as subjects and results are to be recorded in a protocol. Other students from the Master's degree programme Chemistry (M.Sc.) shall be allowed to participate in oral examinations as listeners upon application, unless the 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 matter 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.

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. The examination usually takes place within the framework of a course.

(5) As a rule, the practical form of examination includes: setting up and carrying out experiments as well as examinations in which an extra-textual product is created.

(6) As a rule, combined examinations are: workplace-based assessments, simulations, presentations with a written paper, papers with a presentation and project work. Combined examinations may only comprise examination performances which are suitable for checking the acquisition of different (partial) competences.

(7) In appropriate cases, examinations may also be conducted as group work or as oral group examinations at the discretion of the examiner, if the individual contribution of each individual group member is clearly recognisable, clearly delimitable and assessable.

(8) An electronic examination (e-examination) is an examination which is conducted on a computer by means of an examination programme and the preparation, conduct and evaluation of which are supported overall by information and communication technologies. An e-examination is permissible if it is suitable to prove 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; if necessary, it can be supplemented by other forms of examination. The

examination candidates shall be given sufficient opportunity to familiarise themselves with the electronic examination system before the examination. The e-examination shall be conducted in the presence of a competent person who shall make a record of the course of the examination. At least the names of the person taking the minutes and the examination candidate, the beginning and end of the examination as well as any special incidents must be recorded in these minutes. It must be ensured that the electronic data can be clearly and permanently assigned to the examination candidate. Pursuant to § 26, the examination candidates shall be granted the opportunity to inspect the computer-based examination and the result they have achieved. Data protection regulations shall be complied with.

(9) Any disruptions in the examination process must be reported immediately in writing to the chairperson of the examination board or to the examiner in charge. The assertion of a claim is excluded at the latest if more than three working days have elapsed since the examination was taken.

§ 13 Examinations in the answer-choice procedure

(1) An examination in the answer-choice procedure is deemed to exist if the minimum performance required for passing the examination can be achieved by the examination candidate exclusively by marking or assigning the given answers. Examinations or examination questions in the answer-choice procedure are only permissible if they are suitable to prove 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) The examination questions must be unambiguously comprehensible, free of contradictions, unambiguously answerable and suitable for ascertaining the knowledge of the examination candidates to be examined according to Paragraph 1 Sentence 2. Variations of the same examination questions (also in the answer options) are permissible. The deduction of points within an examination task is not permitted.

(3) If the examiner - according to the faculty- or degree programme-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) The examiner shall select the examination material, formulate the questions, determine the answer options and draw up the assessment rules as well as the assessment scheme in accordance with Paragraph 6. The requirements for passing the examination shall be determined in advance. Before the examination, the examiner shall conduct a review process in which the content and form of the questions are proofread by a second examiner.

(5) The examiner may also create a pool of equivalent examination questions from which the examination candidates each receive different examination questions to answer. The assignment is done by random selection. The equivalence of the examination questions must be ensured.

(6) The examination is passed if the examination candidate has achieved at least 60 per cent of the total achievable points. If the overall average of the points achieved in an examination minus 12 per cent of the overall average is below 60 per cent but above 50 per cent of the total

achievable points, the pass mark shall be calculated according to this sliding clause. A grading scheme that exclusively sets an absolute pass mark is not permissible.

(7) The examination performances shall be assessed as follows: If the minimum number of attainable points required for passing the examination has been achieved, the grade shall be

"very good" if at least 75 per cent,

"good" if at least 50 but less than 75 per cent,

"satisfactory" if at least 25 but less than 50 per cent,

"sufficient" if none or less than 25 per cent of the points

of the points attainable beyond this have been achieved. When calculating the scores, 0.5 values are interpreted in favour of the examination candidate. If the minimum number of points required for passing the examination has not been achieved, the grade shall be "deficient (5.0)".

(8) If the assessment of examination performance reveals a conspicuous accumulation of errors in the answers to individual examination tasks, the examiner shall examine 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. The tasks shall be analysed post hoc. Difficulty index, discriminatory power index, reliability and distractor analysis provide indications of the quality of the questions set. If the review reveals that individual examination tasks are faulty, these are to be reassessed or not taken into account when determining the examination result. The number of examination papers to be taken into account for determining the examination result is reduced accordingly. The reduction in the number of examination papers may not be to the disadvantage of an examination candidate. If the number of points allotted to the examination papers to be eliminated exceeds 20 per cent of the total points attainable, the examination as a whole must be repeated. This shall also apply if only part of an examination performance is to be achieved in the answer-choice procedure.

(7) If an examination performance consists only partly of examination papers in the answer-choice procedure, this paragraph shall apply, with the exception of paragraph 8, sentences 7 and 8, only to the part of the examination produced in the answer-choice procedure.

§ 14 Examination language

Module examinations and, where applicable, their examination elements shall normally be conducted in English. If modules are conducted in another language, the module examination shall also be conducted as a rule in the language concerned and indicated accordingly. The module examination may be conducted in other languages required by the subject requirements if the examination candidate submits a justified application to the chairperson of the examination board.

§ 15 Registration and admission to examinations

(1) Before admission to a module examination, it shall be checked whether the candidate is entitled to take the examination. Admission to a module examination shall be granted if the examination candidate is enrolled in the relevant degree programme at the University of Cologne or at a university with which a corresponding cooperation agreement exists or is admitted as a secondary student, has registered for the respective module examination in due time in accordance with Paragraph 4 and, if applicable, fulfils further requirements in accordance with Paragraph 2 and there is no reason for refusal in accordance with Paragraph 3.

(2) Admission to a module examination may be linked to proof of certain prerequisites. If these prerequisites are coursework, they serve the acquisition of competences and the assessment of learning status for teachers and students. They remain ungraded. If coursework requires attendance at a course for which regular attendance is not required in accordance with § 9 Paragraph 4, students shall be given the opportunity to take an alternative coursework that does not require attendance at the course but is suitable for assessing the learning level in a comparable manner. Course achievements are generally provided in the following formats: Electronic learning level surveys, essays, exercises, homework, short presentations, protocols, reviews, test examinations, thesis papers and similar formats. The respective requirements for admission to a module examination are listed in Annex II.

(3) Admission to a module examination shall be refused if the prerequisites according to Paragraph 1 and Paragraph 2 are not fulfilled, the module examination in the same module has already been passed or a repeat deadline has been missed. Admission to a module examination shall also be refused if the candidate has definitively failed an examination required by the examination regulations in the chosen degree programme at a higher education institution within the area of application of the Basic Law or has lost the right to take the examination; this shall apply mutatis mutandis to degree programmes which have a considerable proximity in terms of content to the previous degree programme. In addition, admission to an examination shall be refused if an examination candidate is on leave of absence pursuant to section 48, paragraph 5, HG, unless one of the exceptional cases specified in section 48, paragraph 5, sentence 4 and sentence 5 HG applies.

(4) Registration is required for each module examination; without registration there is no entitlement to participation in or assessment of the examination performance. As a rule, registration for a module examination must take place no later than one week before the examination date. Notwithstanding this, § 20 paragraph 7 shall apply.

(5) The examination dates must be announced in a suitable manner at the start of lectures, but no later than three weeks before the examination date by posting or on the Internet. Notwithstanding 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 one week before the module examination. Students who have been admitted to a module examination are entitled to attend a published examination date, with the exception of cases of force majeure. Notwithstanding this, § 20 paragraph 7 shall apply.

(6) Three prompt examination dates shall be offered for the performance of an examination. For serious organisational reasons, the chairperson of the examination board may, with the consent of the examination board, stipulate deviating regulations.

(7) Students who are enrolled in more than one degree programme at the same time and who wish to take a module examination that is part of more than one of these degree programmes

must specify in which degree programme they are taking the module examination when registering for this module examination.

§ 16 Deregistration, default and withdrawal from examinations

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

(2) If an examination candidate does not take part in a module examination set in terms of time and place without a valid reason or withdraws from the module examination after it has begun without a valid reason, the examination performance shall be deemed to have been assessed as "deficient (5.0)" or "failed". The same applies if an examination performance is not completed within the specified processing time. § Section 19, paragraph 1 shall apply accordingly.

(3) 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 committee may, if there are valid reasons, waive the assessment of the examination performance as "deficient (5.0)" or "failed". The reasons asserted for the default or withdrawal must be notified to the chairperson of the examination committee in writing without delay and must be made credible. In the case of illness, a medical certificate must be presented. In cases of doubt, the submission of a confidential medical certificate may be requested; the costs shall be borne by the university. The 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 and a relative by marriage in the first degree.

§ 17 Compensation for disadvantages and protective provisions

(1) The special needs of students with disabilities, chronic or mental illnesses and students subject to maternity protection provisions shall be taken into account in order to ensure equal opportunities for them.

(2) If an examination candidate credibly demonstrates that he or she is unable to participate in a module examination in the intended form or to the intended extent due to prolonged or permanent illness or disability, he or she shall be granted compensation for a disadvantage upon written application to the chairperson of the examination board. The submission of a specialist medical certificate may be required for this purpose. This shall apply accordingly with regard to deadlines and dates as well as obligations to participate in courses and coursework to be completed.

(3) The utilisation of the protective provisions in accordance with the maternity protection regulations as well as in accordance with the deadlines of the Federal Parental Allowance and Parental Leave Act (Bundeselterngeld- und Elternzeitgesetz) in the respective applicable version shall be made possible upon application. In these cases, module examinations may be taken despite the leave of absence. If an examination candidate can credibly demonstrate that

she cannot take 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 application to the chairperson of the examination committee. The submission of a specialist medical certificate may be required for this purpose. This applies accordingly with regard to deadlines and dates as well as obligations to participate in courses and coursework to be completed. The application must be submitted immediately after the prerequisites have been met.

(4) 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. The application shall be submitted immediately after the occurrence of the prerequisites.

(5) The applications pursuant to Paragraphs 1 to 4 shall be comprehensively substantiated by the examination candidate, providing suitable evidence. Applications shall be submitted to the chairperson of the examination board within a reasonable period of time prior to the performance of the service. Unless a change in the illness or disability is to be expected, the compensation for disadvantages shall extend to all examinations to be taken during the course of study as well as to the acquisition of participation requirements.

§ 18 Assessment of examinations

(1) Examination performances shall be graded by the examiners or assessed as "passed" or "failed". The following grades shall be used:

1 = very good: an excellent performance;

2 = good: a performance that is considerably above the average requirements;

3 = satisfactory: a performance that meets average requirements;

4 = sufficient: a performance which, despite its shortcomings, still meets the requirements;

5 = deficient: a performance which no longer meets the requirements due to considerable deficiencies.

By lowering or raising the individual marks by 0.3, intermediate values can be formed for differentiated assessment. The grades 0.7; 4.3; 4.7 and 5.3 are excluded. An examination performance is passed if it has been graded with "sufficient (4.0)" or better or has been assessed as "passed".

(2) Examination performances with which this degree programme is completed and examination performances in repeat examinations for which no compensation option is provided in the event of a final failure, as well as the Master's thesis, shall be assessed by two examiners; the appointment shall be made by the chairperson of the examination board. If a graded examination performance is assessed by two examiners, the grade of the examination performance results from the arithmetic mean of the two individual assessments. If, 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. In this case, the grade is calculated from the arithmetic mean of the three individual grades. If the average is worse than "sufficient (4.0)", the examination performance shall be assessed as "sufficient (4.0)" in deviation from the arithmetic mean if two individual assessments are "sufficient (4.0)" or better. If two individual assessments are "deficient (5.0)", the examination performance shall be assessed as "deficient (5.0)", deviating from the arithmetic mean.

(3) If a written examination which is assessed as "passed" or "failed" is assessed by two examiners, the chairperson of the examination board shall appoint a third examiner who shall determine the final assessment if the two examiners' assessments differ.

(4) In the case of combined forms of examination pursuant to § 12, paragraph 6, an overall assessment shall take place. In the case of grading, the grade shall be shown in accordance with Paragraph 1.

(5) If a module examination consists of several examination elements, the assessment shall be carried out in accordance with the provisions set out in Annex II.

(6) unoccupied

(7) The overall grade of the degree programme shall be formed as the weighted arithmetic mean of the module grades and the grade of the Master's thesis and the Master's colloquium according to the weighting shown in Annex II. The preliminary overall grade of the degree programme is formed as the weighted arithmetic mean of the already existing grades of the successfully completed or recognised modules.

(8) Grades are shown with one decimal place and are used in this form for further calculations; all other decimal places are deleted without rounding. In the Transcript of Records, the overall grade of the degree programme is shown with two decimal places. All further decimal places shall be deleted without rounding.

(9) Grades that result as averaged values are:

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.

(10) If the overall grade pursuant to Paragraph 9 is 1.2 or better, the overall grade "with distinction" shall be awarded.

§ 19 Announcement of examination results

(1) As a rule, examination candidates shall be notified of the assessment of examination results within four weeks by posting the assessment information in the campus management system. If this regulation is deviated from, the reasons shall be recorded. The assessment shall be

deemed to have been announced two weeks after it has been posted in the campus management system. The result of an oral examination performance shall be communicated to the examination candidate after the examination.

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

§ 20 Repetition of module examinations

(1) Failed module examinations may be repeated. The number of examination attempts per module may be limited to three, notwithstanding the provisions of § 21, Paragraph 12. Further details are regulated by the provisions in Annex II. With regard to all modules of the Master's degree programme in which the number of examination attempts is limited to three, there are a total of two additional examination attempts. In addition, examination candidates who have earned at least 78 credit points receive one additional examination attempt. If an examination is not passed after exhaustion of the two additional examination attempts and, if applicable, the further examination attempt according to sentence 5, the degree programme is definitively failed with the consequence of exmatriculation from the degree programme. The additional examination attempts according to sentences 4 and 5 do not refer to the repetition of the Master's thesis.

(2) If the number of examination attempts for a module is limited to three and the examination candidate has failed for the third time, the chairperson of the examination board shall inform the candidate in writing whether it is possible to take additional examination attempts for this examination in accordance with paragraph 1, sentences 4 and 5. If this possibility exists, the module examination must be successfully taken no later than two years after receipt of the notification pursuant to sentence 1. If this module examination is not offered at least twice during this period, the deadline shall be extended by a further year. If the deadline is missed for reasons for which the examination candidate is responsible, the module examination is definitively failed with the consequence of exmatriculation from the degree programme.

(3) The following applies to additional examination attempts in compulsory elective modules: If a candidate has failed a module examination in a compulsory elective module for which the number of examination attempts is limited to three according to 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) Before taking a first additional examination attempt according to Paragraph 1, it is strongly recommended to take advantage of counselling opportunities. The examination candidate shall receive a written invitation to counselling for this purpose, which shall also provide information on the counselling options available.

(6) If a module examination consists of several examination elements, two pass or repeat options are possible:

a) All examination elements must be assessed with "passed" or with "sufficient (4.0)". All examination elements of the module examination assessed with "deficient (5.0)" or "failed" must be repeated (option A). Paragraphs 1 to 4 apply accordingly to examination elements.

b) All examination elements of the module examination are included in the module grade according to the weighting shown in Annex II. If the module grade determined in this way is at least "sufficient (4.0)", the module examination is passed. If the module grade determined in this way is worse than "sufficient (4.0)", examination elements of the module examination assessed as "insufficient (5.0)" must be repeated until the module grade is at least "sufficient (4.0)" overall. Passed examination elements cannot be repeated, except in the case of paragraph 10. Module examinations according to this regulation are not subject to any attempt restriction (variant B).

The specification of a variant is shown for each module in Annex II.

(7) In the case of repeat examinations, the chairperson of the examination board may, at the request of the examiner, specify a different examination form or different variants of the respective examination form.

(8) In the case of repeat examinations, the deadlines pursuant to § 15, paragraphs 4 and 5 may be deviated from in justified cases.

(9) A Master's thesis shall be repeated in accordance with § 21, paragraph 11.

(10) The rules set out in Annex II shall apply to the repetition of passed module examinations.

§ 21 Master's Thesis Module

(1) The Master's thesis is an examination performance in the form of an independently written paper and a colloquium, which shall 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 programme using the required methods within a specified period of time.

(2) The Master's thesis is written during the course of study. 30 credit points are awarded for the module. The requirements for admission to the Master's thesis are listed in Annex II.

(3) unoccupied

(4) The chairperson of the examination board shall commission an examiner in accordance with § 23, Paragraph 3, to set the topic of the Master's thesis and shall appoint another examiner for a second opinion. The examination candidate has the right to suggest the topic and the choice of the examiner. The topic is communicated to the examination candidate in writing 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 shall be recorded. The topic is only issued when at least 72 credit points have been acquired and three A and three E modules have been successfully completed. The topic can be returned once within two weeks of issue.

(5) The processing time for the Master's thesis is a maximum of 6 months beginning with the issue of the topic. The latest date of submission of the Master's thesis is noted on the registration form. The content and scope of the Master's thesis topic must be such that it can be completed within the time limit according to sentence 1. Upon justified written application by the student, 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 at least two weeks before the deadline for submission. Notwithstanding this, the regulations pursuant to § 17 shall apply.

(6) The Master's thesis shall be written in English. Deviating from this, the chairperson of the examination committee may, upon application of the examination candidate and with the consent of the examiner, allow the Master's thesis to be written in another language, provided that the assessment is ensured.

(7) The provisions of good scientific practice shall apply to the preparation of the Master's thesis. The Master's thesis may not have been submitted in the same or similar form or in excerpts as part of another examination. If this is violated, the thesis shall be assessed as "deficient (5.0)".

(8) The Master's thesis shall contain a list of the aids used. 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. All passages taken verbatim or in spirit from published and unpublished writings are marked as such. The work has not yet been submitted in the same or similar form or in excerpts within the framework of another examination. I affirm that the submitted electronic version corresponds completely to the submitted printed version". If the affirmation in lieu of oath was submitted incorrectly, the legal consequences of § 63 paragraph 5 HG may apply.

(9) Four copies of the Master's thesis - three printed and firmly bound copies and one read-only electronic version - shall be submitted to the examination office in due time; the date of submission shall be recorded. If the Master's thesis is not submitted in due time, it shall be deemed to have been assessed as "deficient (5.0)".

(10) The assessment of the Master's thesis shall 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. If this regulation is deviated from, the reasons are to be put on record. The assessment shall be deemed to have been announced two weeks after posting in the campus management system.

(11) A Master's thesis graded "deficient (5.0)" or deemed deficient may be repeated once with a new topic. The registration for the repetition must be made within two months after the announcement of the assessment. A second repetition of a failed Master's thesis is excluded. If a Master's thesis is not passed after one repetition, the degree programme is definitively failed. The repetition of a passed Master's thesis is excluded.

(12) After successful completion of the Master's thesis and all other modules of the Master's degree programme, the Master's colloquium shall take place. In the master colloquium, which is attended by the examiners, the candidate reports on the results of the master thesis and presents them for discussion. The expert reports on the Master's thesis must be available

before the Master's colloquium. The grading of the Master's colloquium is based on the arithmetic mean of the individual evaluations of the experts on the day of the Master's colloquium. The Master's colloquium may be repeated twice; if the second repetition is also not passed, the degree programme is definitively not passed. The repetition of a passed master colloquium is excluded. The grade for the module results from the grades for the Master's thesis and the Master's colloquium in the ratio 2:1.

(13) The notice of failure of the Master's thesis shall be formally sent to the examination candidate by the chairperson of the examination committee to the postal address deposited in the campus management system. The decision shall be accompanied by instructions on how to appeal.

§ 22 Examination Board

(1) The Faculty of Mathematics and Natural Sciences shall form an examination board for the organisation of examinations and the tasks assigned by these regulations.

(2) The examination board shall consist of the following nine members with voting rights:

1. the chairperson from the group of university professors,
2. four further members from the group of university teachers,
3. one member from the group of academic staff,
4. one member from the group of technical and administrative staff,
5. two members from the group of students.

(3) The examination board shall elect a deputy for the chairperson from among the members pursuant to paragraph 3 no. 2. The term of office of the chairperson shall be three years. Re-election shall be possible.

(4) One deputy each shall be elected for the members according to paragraph 2 nos. 2 to 5. The deputies shall act if the members from the respective group are prevented from attending.

(5) The Chairperson may invite other persons, in particular deputy members, to attend meetings of the Audit Committee, provided this appears to be relevant and the majority of the voting members present do not object.

(6) The members and their deputies shall be elected by the Faculty of Mathematics and Natural Sciences separately according to groups. The groups shall have a right of nomination. The members from the group of university teachers, from the group of academic staff and from the group of technical and administrative staff shall be elected for three years, the members from the group of students for one year. Re-election is permitted. The term of office of a deputy shall end with the term of office of the corresponding member. If a member or an alternate according to paragraph 2 nos. 2 to 5 resigns prematurely, a successor shall be elected for the remaining term of office.

(7) The Audit Committee shall constitute a quorum if the Chairperson or his/her deputy and at least three other members are present. If the vice-chairperson chairs a meeting because the chairperson is prevented from attending, the vice-chairperson's deputy member shall be granted additional voting rights in accordance with paragraph 4. In matters directly affecting teaching, with the exception of its assessment, it must be ensured that members from the group of university teachers have at least half of the votes. The examination board shall decide by a simple majority of those present who are entitled to vote. In the event of a tie, the chairperson shall have the casting vote. The member of the examination board from the group of employees in technology and administration shall only have the right to vote in matters of teaching insofar as he or she performs corresponding functions in the university and has special experience in the respective area; such experience shall be assumed in particular if the employee fulfils the status of an examiner pursuant to Article 65 paragraph 1 sentence 2 HG. The chairperson or, in cases of doubt, the rectorate shall decide on the existence of these requirements at the beginning of the member's term of office. The members from the group of students shall only vote on pedagogical-scientific decisions, in particular on the assessment and crediting of examinations, the determination of examination tasks as well as on decisions on objections in this respect, if they fulfil the examiner status according to § 65 paragraph 1 sentence 2 HG.

(8) The examination board shall ensure that the provisions of these regulations including their annexes are complied with. In particular, it decides on appeals against decisions made in examination procedures. It shall report to the Faculty of Mathematics and Natural Sciences once a year on the development of the Master's examinations and the study periods, disclose the distribution of overall grades and, if necessary, make suggestions for amendments to these Regulations.

(9) The meetings of the examination board are not public. The members as well as their deputies shall be subject to official secrecy. If they are not in public service, they shall be sworn to secrecy by the chairperson.

(10) The members of the examination board and their deputies shall have the right to be present at examinations. The right to be present does not extend to the discussion of the examination result.

(11) The examination board shall have the Master's Examination Office Chemistry at its disposal for the organisational handling of the examination procedures.

(12) The chairperson of the examination board, or his/her deputy if the chairperson is prevented from attending, shall represent the examination board, convene the meetings of the examination board, chair them and implement the resolutions passed there. The Audit Committee may delegate the performance of its duties to the Chairperson for all regular cases. 3In case of urgency, the chairperson may hold a vote by circular resolution. 4The chairperson may take decisions that cannot be postponed instead of the examination board; the examination board shall be informed of such decisions without delay; the examination board may revoke the decision; rights of third parties that have already arisen shall remain unaffected. 5Decisions on objections shall be reserved for the examination board. 6 Minutes shall be taken for each meeting of the examination board.

(13) The chairperson of the examination board shall announce orders, the setting of deadlines and time limits as well as other communications of the examination board which do not only

concern individual persons with legally binding effect by posting notices or by other suitable means.

§ 23 Examiners, assessors, electronic examination

(1) Examiners shall be appointed from the group of university teachers and from among the members and affiliates of the faculty pursuant to § 65, paragraph 1, HG. Examination performances may only be assessed by persons who themselves possess at least the qualification to be established by the examination or an equivalent qualification. Examiners who have left the University of Cologne 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. Only persons who have obtained a relevant degree at least at Master's level or an equivalent qualification at a higher education institution may be appointed as examiners.

(2) The examination board shall appoint the examiners and the assessors. It may delegate the appointment to the chairperson. The appointment of examiners and assessors shall be recorded.

(3) The chairperson of the examination board shall appoint the examiners responsible for the Master's thesis from among the professors, associate professors, honorary professors, junior professors and private lecturers. In justified exceptional cases, the chairperson of the examination board shall decide on the appointment of further examiners who fulfil the requirements according to § 65 paragraph 1 HG. He or she may delegate the appointment to the chairperson. Examiners 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 the University of Cologne. The examination board may extend this period upon justified application. It may delegate this decision to the chairperson. University teachers from a university linked by a partnership or cooperation agreement may be appointed as topic examiners for a Master's thesis upon a justified application by the university teachers representing a subject. The appointment of examiners for the Master's thesis shall be recorded.

(4) In agreement with the examination board, 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. If no agreement can be reached, the examination board shall decide.

(5) Upon general and announced decision of the examination board, written examination performances may be checked electronically for unmarked text copies. In this case, the examination candidates are obliged to submit the written examination results electronically as well and to confirm that the contents of the written and electronic versions correspond. The electronic verification pursuant to sentence 1 also includes the use of written examination performances for the purpose of comparison with later written examination performances of third parties, provided there is a factual connection between the examination performances. The resolution pursuant to sentence 1 must regulate

a) which examination performances may be checked electronically

b) whether the examination board will make use of an administrative assistant and, if so, who this assistant will be,

- c) in which file format, in which manner and at which location the electronic version is to be submitted,
- (d) what criteria are used to select the examination scripts to be reviewed; and
- e) how long the electronic versions may be used.

Notwithstanding letter sentence 1, in the case of justified initial suspicion of cheating, electronic verification is always permissible. Notwithstanding sentence 4, use shall end at the latest at the same time as the retention period for the examination file pursuant to Section 26, paragraph 4. Without the consent of the examination candidates, any use of the electronic version by examiners or the examination board other than for the purpose of assessing or reviewing examination performance shall be inadmissible. The result of an electronic examination may only form the basis of an incriminating examination decision if it has been confirmed by the examiners responsible.

(6) Examiners are independent of instructions in their examination activities. They and, if applicable, the assessors shall be subject to official secrecy. If they are not in public service, they shall be sworn to secrecy by the chairperson of the examination board.

§ 24 Deception, breach of order

(1) If an examination candidate attempts to influence the assessment of an examination performance by deception, for his or her own or another person's advantage, if he or she carries aids not permitted in the examination or commits academic misconduct in the performance of the examination, he or she commits an act of deception.

(2) As a consequence of an act of cheating according to Paragraph 1, the examination board shall pronounce one of the following sanctions against the examination candidate:

- (a) a warning;
- b) the examination candidate shall be required 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".

In serious cases or in the case of repetition, the examination board may exclude the examination candidate from taking further examinations, whereby the examination entitlement in the degree programme expires. A serious case is considered in particular if the candidate at least grossly negligently

- a) makes false statements in academic work or falsifies the thoughts or findings of others (falsification),
- b) seriously impairs the examination work or research activities of others (sabotage),
- c) reproduces another's formulation, thought or knowledge without disclosing the authorship (plagiarism).

(3) Particularly in the case of justified suspicion of plagiarism, the examination board may have further - also electronic - checks carried out without the consent of the examination candidates.

(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) Anyone who disrupts the taking of an examination may be excluded by the respective examiners or invigilators from further performance of the examination; in this case, the examination shall be deemed to have been assessed as "deficient (5.0)" or "failed". The reasons for the exclusion shall be recorded.

(6) Prior to a decision pursuant to Paragraph 1 and Paragraph 2, 1 sentence 1 and 2, the examination candidate shall be granted a legal hearing. The examination candidate shall be informed of the decision in writing without delay, the reasons for the decision shall be given and an appeal notice shall be included.

(7) In addition, administrative offence proceedings may be initiated in accordance with § 63, paragraph 5. It is also an administrative offence to attempt to influence the result of an examination to someone else's advantage.

§ 25 Invalidity of examinations, withdrawal of the Master's degree

(1) If the requirements for admission to an examination were not fulfilled 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. If 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 board may subsequently correct the assessment for that examination performance in which the examination candidate cheated and declare the examination performance wholly or partially failed.

(3) The Master's degree may be withdrawn if it is found that it has been obtained by deception or if essential requirements for the award have been mistakenly considered to have been met.

(4) The examination candidate shall be given the opportunity to comment before a decision is made in accordance with paragraphs 1 to 3. The examination board shall be responsible for the decision and shall make its decision in compliance with the provisions of the Administrative Procedure Act of the State of North Rhine-Westphalia (VwVfG NRW). No decision shall be taken after a period of five years from the date of the certificate.

(5) The incorrect certificate and all incorrect annexes shall be withdrawn and, if necessary, reissued. If the degree programme as a whole has been declared failed, the academic degree shall be withdrawn by the Faculty of Mathematics and Natural Sciences and the certificate shall be confiscated.

§ 26 Examination file, inspection of files

(1) An examination file shall be kept by the examination board for each examination candidate. The examination file shall document in particular the examination attempts, the examination papers, the examiners' reports relating thereto, the examination protocols, the examination results, grade calculations and copies of the certificates and diplomas. The examination file shall be kept in writing or in full or in part electronically.

(2) An examination candidate may obtain information on the status of the examination results at any time within the scope of organisational possibilities.

(3) After the announcement of an examination result, each examination candidate or a corresponding authorised representative shall, upon written request, be granted access 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. Within the scope of this inspection, the examination candidate or his or her authorised representative must be given the opportunity to make either copies or photographs of the documents; any sample solutions issued may not be copied or photographed as they are not part of the examination candidate's examination file. The further procedure for inspection, including an appropriate deadline for the inspection request, is regulated by the examination board. After expiry of the specified deadlines, inspection is only possible if an examination candidate is demonstrably not responsible for missing the deadline. There shall be no further right to information.

(4) The examination file shall be kept until the end of the fifth year following the completion of studies and then offered to the legally competent archive; if the archive refuses to accept it, it may be destroyed. With the exception of the Master's thesis, written examination documents including associated assessment documents may be offered to the archives as early as two years after the announcement of the assessment, provided that no legal dispute is pending; this applies accordingly to electronic versions; if the archives refuse to accept them, they may be destroyed. The academic degrees awarded and a catalogued collection of the certificates and documents awarded may be kept in a register until the expiry of the fiftieth year following the completion of studies; sentence 1, second half-sentence shall apply *mutatis mutandis*.

§ 27 Completion of studies and graduation documents

(1) The degree programme shall be deemed to have been successfully completed if all required examination performances have been passed and the corresponding credit points have been earned. A certificate shall be issued on the successful completion of studies. The certificate shall be signed by the chairperson of the examination board and shall contain the name of the degree programme, the overall grade, the grades of the individual modules, the topic of the Master's thesis, the grade of the Master's thesis and the grade of the Master's colloquium. Grades shall be given in words and numerically. It is issued with the date of the day on which the Master Colloquium was successfully completed. In addition, an English-language copy of the certificate is issued. The German version is legally binding.

(2) Together with the certificate, the Master's degree certificate shall be issued to the student, certifying the award of the degree pursuant to § 3; this certificate shall bear the date of the certificate. The Master's certificate shall be signed by the Dean of the Faculty of Mathematics

and Natural Sciences and by the Chairperson of the Examination Committee and shall bear the seal of the Faculty of Mathematics and Natural Sciences.

(3) Together with the certificate and the Master's degree certificate, a Diploma Supplement in German and English shall be handed out, which provides information on the subject profile of the completed degree programme and the academic and professional qualifications acquired with the degree. The Diploma Supplement also describes the completed degree programme and provides information about the faculty. Part of the Diploma Supplement is the Transcript of Records.

(4) If a candidate has not passed or has definitively failed the degree programme or has dropped out or is transferring to another higher education institution, a certificate (Transcript of Records) on the examinations taken, the supplementary studies and achievements, the grades and the credit points acquired shall be issued to the candidate on application. If applicable, it must indicate that the degree programme has not been passed or has been definitively failed.

§ 28 Transitional provisions

The Examination Committee shall ensure that credit points already earned in modules which change in nature or scope or are discontinued continue to be credited in the degree programme. The same applies to the participation requirements of the modules.

§ 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 on 1.10.2020. At the same time, the regulations of 17.08.2015 shall cease to apply.

Insofar as provisions of these regulations contradict the regulations of the resolution of the Rectorate of the University of Cologne on the regulation of aspects of examination law in accordance with the regulation on coping with the challenges posed to university operations by the coronavirus SARS-CoV-2 epidemic (Corona Epidemic University Regulation), as amended from time to time, or the resulting resolutions of the responsible examination board, these regulations and resolutions shall take precedence over the provisions of these regulations for their period of validity.

Issued on the basis of the resolution of the Narrow Faculty of the Faculty of Mathematics and Natural Sciences of 09.07.2020 and after examination of the legality by the Rectorate of 25.08.2020.

Cologne, 21.09.2020

The Dean of the Faculty of Mathematics and Natural Sciences of the University of Cologne

Prof. Dr. Paul H. M. van Loosdrecht

Appendices.

I. Determination of Suitability for the Master's Programme in Chemistry at the University of Cologne:

1. Purpose of the assessment

Qualification for the Master's programme in Chemistry requires, in addition to the prerequisites according to § 4 (1) a) and c) of the examination regulations, proof of special aptitude according to § 4 (1) b) in accordance with the following regulations.

2. Procedure for determining the study ability

2.1 The procedure for determining special aptitude is carried out twice a year in the winter and summer semesters. The number of admissions may be determined annually on the basis of available capacity.

2.2 Applications for admission to the assessment procedure for the following winter semester must be submitted by 15 July, for the following summer semester by 15 January of a year (cut-off deadline). Applicants who have acquired their university degree qualifying for this application in the area of application of the Basic Law shall submit their application to the examination board of this Master's degree programme. All other applicants submit their application via the UNI-ASSIST portal (<http://www.uni-assist.de/>). These applications are collected by UNI-ASSIST, checked for formal correctness and forwarded to the examination board for suitability determination.

2.3 The application must be accompanied by:

a. a curriculum vitae in tabular form,

b. proof of a successfully completed Bachelor's degree in Chemistry at the University of Cologne or at another university within the scope of the German Higher Education Framework Act (Hochschulrahmengesetz), which is at least equivalent to the Bachelor's degree in Chemistry at the University of Cologne, or an academic degree recognised as equivalent by the Examination Committee. The same applies to foreign degrees. For students who complete the Bachelor's degree programme in the current summer semester (winter semester), the submission of the examination results (at least 142 LP) evidenced by 15 July (15 January) with an indication of the grade point average and proof of the start of the Bachelor's thesis are sufficient. The final transcript must be submitted at the latest 6 weeks after the start of the 1st semester. If no examination dates for modules not yet completed are offered between the time of application and the expiry of this deadline, this deadline is extended until the end of the first semester.

c. a tabular list of the modules and credit points (according to 3.2.) as well as the modules not yet completed from the current Bachelor's degree programme, stating the next possible examination dates (see 2.3.b),

d. Proof of sufficient English language skills (according to 3.3.),

e. a letter of motivation,

f. Names of two university teachers from whom references can be obtained.

3. Assessment procedure

3.1 Admission to the assessment procedure requires that the documents listed in section 2.3 have been submitted in full and on time.

3.2 Applicants must provide evidence of at least 12 credit points from each of the following areas:

- (a) Inorganic chemistry,
- (b) Organic Chemistry and Biochemistry,
- (c) Physical Chemistry and Theoretical Chemistry.

In total, at least 60 credit points from the above-mentioned areas must be proven. In case of doubt, the examination board decides on the fit of the achievements.

3.3 Applicants must prove sufficient English language skills. Sufficient language skills are considered to be level C1 of the Common Framework of Reference for Languages of the European Union or comparable knowledge. An orientation interview in English will be held with applicants who demonstrate level B2 (in accordance with the regulation under point 3.5). For applicants who have acquired the general higher education entrance qualification within the area of application of the Basic Law, sufficient knowledge of the English language is deemed to be proven. Proof of sufficient English language skills is not required for applicants who have completed their Bachelor's degree or the degree recognised as equivalent in English. The examination board decides on exceptions.

3.4 Applicants with a Bachelor's overall grade or a preliminary overall grade according to 2.3.b of 2.5 or better and the prerequisites from 3.2 and 3.3 are generally admitted to the Master's degree programme in Chemistry.

3.5 In cases of doubt, an orientation interview can be held with the applicant. In this orientation interview, the suitability for the course of study is checked on a subject-related basis. Furthermore, references can be obtained from the university lecturers mentioned under 2.3.c.

3.6 On the basis of the documents submitted and, if applicable, the interview, the examination board decides on the admission of the applicant to the Master's degree programme in Chemistry.

4 Determination and announcement of the result

The Examination Committee will inform the applicant of the result of the assessment procedure in writing by the end of August for an application for the winter semester and by the end of February for an application for the summer semester. If the documents according to 2.3.b are submitted later, admission is subject to reservation.

5. Notice of admission and notice of rejection

Applicants who have been admitted receive a letter of admission from the University of Cologne. The admission notification shall state the deadline by which the applicant must enrol. If

this deadline is missed (cut-off deadline), the notification of admission becomes invalid. Admission to the degree programme may be subject to conditions which must be fulfilled within a specified period of time (section 2.3.b). Applicants who cannot be admitted will receive a rejection notice with instructions on how to appeal.

6. Minutes

Minutes must be taken of the assessment procedure.

II. Descriptions and specific conditions of the modules

The programme comprises 11 modules. In detail it includes:

Three A-modules (Advanced Modules, 6 credit points each), three E-modules (Experimental Modules, 9 credit points each), three P-modules (Project Modules, two with 12 credit points each, one with 15 credit points, the latter with a Research Proposal), 1 S-module (Supplementary Module with 6 credit points) as well as the module Master's Thesis with Master's Colloquium amounting to 30 credit points.

Module	Participation requirements	Start / Cycle / Duration	Module type and compulsory participation (CP)	Examination requirements	Test elements	Participation restrictions ^d	P / WP	Credit points	weight for final grade
Advanced Inorganic Chemistry A-IC	none	WS & SS / every semester / full semester	V / S(CP) ^a	Seminar-Lecture	K ^c	3	WP	6	6 / 120
Advanced Organic Chemistry A-OC	none	WS & SS / every semester / full semester	V / S(CP) ^a	Seminar-Lecture	K ^c	3	WP	6	6 / 120
Advanced Physical Chemistry A-PC	none	WS & SS / every semester / full semester	V / S(CP) ^a	Seminar-Lecture	K ^c	3	WP	6	6 / 120
Advanced Biochemistry A-BC	none	WS & SS / every semester / full semester	V / S(CP) ^a	Seminar-Lecture	K ^c	3	WP	6	6 / 120
Advanced Theoretical Chemistry A-TC	none	WS & SS / every semester	V / S(CP) ^a	Seminar-Lecture	K ^c	3	WP	6	6 / 120

		/ full semester							
Experimental Inorganic Chemistry E-IC	Registration for the module A-IC	WS & SS / every semester / full semester	Ü (CP) ^b	Successful completion of the lab exercises	MP ^e	3	WP	9	9 / 120
Experimental Organic Chemistry E-OC	Registration for the module A-OC	WS & SS / every semester / full semester	Ü (CP) ^b	Successful completion of the lab exercises	MP ^e	3	WP	9	9 / 120
Experimental Physical Chemistry E-PC	Registration for the module E-PC	WS & SS / every semester / full semester	Ü (CP) ^b	Successful completion of the lab exercises	MP ^e	3	WP	9	9 / 120
Experimental Biochemistry E-BC	Registration for the module A-BC	WS & SS / every semester / half semester	Ü (CP) ^b	Successful completion of the lab exercises	K ^c	3	WP	9	9 / 120
Experimental Theoretical Chemistry E-TC	Registration for the module A-TC	WS & SS / every semester / full semester	Ü (CP) ^b	Successful completion of the exercises	MP ^e	3	WP	9	9 / 120
Project Module 1 and 2 P1 and P2	1 A-module & 1 E-module successfully completed	continuously possible	V / Ü (CP) ^b / S (CP) ^g	Successful completion of lab exercises & seminar, protocol submission no later than 6 weeks after completion	MP ^e	3	P	12 12	14 / 120 14 / 120
Project Module 3 with Research Proposal P-RP	1 A-module & 1 E-module successfully completed	continuously possible	V / Ü (CP) ^b / S (CP) ^g / RP	Successful completion of lab exercises & seminar, protocol submission no later than 6 weeks	MP ^e + RP (combined exam)	3	P	15	17 / 120

				after completion					
Supplementary Module S	1 A-module & 1 E-module successfully completed	continuously possible	all combinations possible	none	free	none	P	6	0 / 120
Master Module Ma	72 LP, 13 A-modules & 3 E-modules successfully completed	continuously possible		see § 21 (4) and (12)	MSc Thesis / oral MSc exam ^f	2 / 3	P	30	30 / 120

V / S / Ü / RP: Lecture (= **V**orlesung) / **S**eminar / exercise (= **Ü**bung) = practical course or research project / research proposal;

CP: compulsory attendance; **K / MP:** written (= **K**lausur) / oral examination (= **M**ündliche **P**rüfung).

^a Attendance is compulsory for seminars on A modules with < 30 participants, as here the academic discourse is practised on the basis of own presentations. Thus, additional competences in the preparation of lectures and in presentation techniques as well as in leading discussions are acquired.

^b In principle, attendance is compulsory for all experimental practical courses, since the competence "safe and targeted work in the chemical laboratory" can only be acquired in the same. Any absences can be made up by additional working days at the end of the practical. Details are regulated in the corresponding internship regulations.

^c Duration 120 minutes.

^d In the entire Master's programme, one repetition of a passed examination is permitted, in which case the better of the two obtained grades is used for the calculation of the overall grade. This does not apply to the Master's thesis and the Master's colloquium.

^e Duration 30-40 minutes.

^f Duration 60 minutes.

^g Compulsory attendance at seminars on P modules for practising academic discourse and for safety reasons. These seminars also serve to teach competences in the areas of chemical safety and laboratory work safety.