



Unofficial Translation of the German Original. The German Examination Regulation represents the only legally binding version.

Examination regulations

Programme-specific part

for the Master's programme

Biomedical Sciences

at the Rheinbach Campus

of the

Bonn-Rhein-Sieg University of Applied Sciences

of 23.03.2023

**in the version of the first amendment regulation dated
12.12.2024**

On the basis of § 2 paragraph (4) and § 64 of the Higher Education Act of the State of North Rhine-Westphalia (Higher Education Act - HG NRW) in the version published on 16 September 2014 (GV. NRW. page 547), last amended by the Act of 30 June 2022 (GV. NRW. p. 780b), the Department of Applied Natural Sciences at the Rheinbach Campus of Bonn-Rhein-Sieg University of Applied Sciences has issued the following examination regulations:

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General

§ 1 Scope of the Examination Regulations

(1) These examination regulations shall apply in addition to the General Part of the Examination Regulations (PO-A) of the Faculty of Applied Natural Sciences of the Bonn-Rhein-Sieg University of Applied Sciences for the Master's degree programme in Biomedical Sciences.

(2) The Examination Board of the Faculty of Applied Natural Sciences of the Bonn-Rhein-Sieg University of Applied Sciences is responsible for matters relating to these examination regulations.

§ 2 Aim of the programme, purpose of the examination, academic degree

(1) The educational objective of the English-language Master's programme in Biomedical Sciences is a professionally qualifying degree as a "Master of Science" (abbreviated to: M.Sc.). Students are enabled to independently develop scientific results and to plan and conduct clinical studies. The study programme deepens specialist competences in the field of biomedicine at the cellular and molecular level. In addition, the students receive sound knowledge for the approval of medical products. The degree programme thus qualifies students for further professional qualification within the framework of a doctorate or for employment in companies in the field of clinical research or diagnostics.

(2) After passing the final examination, the academic degree "Master of Science (M.Sc.)" is awarded in the degree programme Biomedical Sciences.

(3) The study programme leading to this degree provides the student with knowledge and understanding of biomedical sciences within the meaning of § 58 HG NRW.

(4) The final examination shall determine whether the student has acquired the specialist knowledge required for independent professional activity and is qualified to work independently based on scientific knowledge and methods.

§ 3 Prerequisites for study

(1) The admission requirements for admission to the Master's programme specified in §2 of the PO-A shall apply.

(2) The prerequisite for admission to the Master's degree programme in Biomedical Sciences is a previous, professionally qualifying university degree (e.g. Bachelor's degree or equivalent or higher degree) which has provided the minimum knowledge necessary for the study of the Master's degree programme. At least 180 ECTS must have been acquired in the professional qualification. Applicants with a professional qualification in the field of biology, pharmacy or medicine or related disciplines must also prove knowledge in the subjects Molecular Biology/Genetics, Immunology, Human Biology, Physiology and Developmental Biology to the extent of at least 6 ECTS each. Graduates of the Bachelor's degree programme in Natural Science Forensics must demonstrate knowledge in the subjects Cell Biology, Forensic Genetics, Biochemistry, Physiology and Immunology of at least 6 ECTS each. All applicants must have acquired the required knowledge in a previous degree programme or alternatively through additional practical training completed at a university. These must be clearly

documented in terms of scope and content. The examination board shall decide on the recognition of the additional internships. The first professional qualification must have a final grade of at least 2.5. State regulations for admission to the Master's degree programme which go beyond the aforementioned admission requirements shall remain unaffected by this regulation.

(3) Foreign applicants who are not treated as equivalent to Germans by or on the basis of international treaties and who do not have a German university entrance qualification must provide proof that they have passed the examination to determine their aptitude for the degree program. The exact procedure for conducting this examination is set out in a separate regulation (Regulations for the Procedure of Determining the Study Aptitude of foreign students for the Master's degree program Biomedical Sciences).

§ 4 Standard period of study, scope of study, language of instruction

(1) The standard period of study shall be four semesters including the final thesis and final colloquium. The duration of the final thesis shall be five months.

(2) The course of study and the conduct of the module examinations shall be structured by the course of study plan and the general examination plan in such a way that the course of study can be completed within the standard period of study.

(3) In justified cases (e.g., pregnancy and birth, bringing up children, care of persons in need of care, severe disability, stay abroad, participation in the self-administration of the university), the examination board may agree to a modified course of study.

(4) A total of 120 ECTS is acquired through the study of Biomedical Sciences.

(5) The scope of study comprises compulsory modules and compulsory elective modules - specified in the curriculum.

(6) Compulsory modules are mandatory for all students of the degree programme and conclude with a graded module examination. Compulsory elective modules are modules that are selected at the beginning of the semester from a catalogue of compulsory elective modules offered by the department and conclude with a graded or ungraded module examination. The examination results of the compulsory modules that are completed with a graded module examination are included in the overall grade of the transcript.

(7) With the consent of the examination board, elective modules can be attended at another department of the H-BRS or at another higher education institution within the area of application of the Basic Law for the Federal Republic of Germany Basic Law (Grundgesetz, GG), one of the partner universities or another foreign higher education institution.

(8) All compulsory courses of the Biomedical Sciences degree programme are offered in English. Enough compulsory elective courses are taught in English, additional offers of compulsory elective courses can also be taught in German if necessary. For the determination of the language of the courses, see also Appendix 1. The language of the compulsory elective courses is determined by the dean.

§ 5 Scope and structure of the module examinations

(1) The Master's degree programme in Biomedical Sciences is divided into modules assessed with credit points, in which graded and ungraded module examinations are to be taken (Appendix 1). The final thesis (thesis) with the final colloquium is assessed with 30 ECTS.

(2) In the case of modules that include a practical course, proof of successful completion of the practical course within the framework of a test is generally a prerequisite for the final passing of a module.

(3) The range of courses in the compulsory elective catalogue depends on the possibilities of the Department of Applied Natural Sciences. The contents of the compulsory elective catalogue are subject to change. The current compulsory elective catalogue is announced at the beginning of the semester by announcement and/or in electronic form.

Regulations on the course of study

§ 6 Examinations in the course of studies, study plan and study schedule

(1) The examination board shall draw up a general examination schedule to inform students at the beginning of their studies in which examination period a module will be examined for the first time and when the repeat examination will be.

(2) The study plan, Appendix 2, shows the timing of the modules during the regular study programme.

(3) The study plan, Appendix 3, provides information on the course forms of the modules (lecture, seminar teaching, tutorial, practical course) and the respective temporal scope in semester hours per week as well as the student workload in the form of ECTS.

(4) All modules of the degree programme shall be included in a lecture plan each semester. The lecture times and the lecture schedule shall be announced at the beginning of each lecture period by announcement and/or in electronic form.

§ 7 Compulsory attendance

To acquire practical skills, attendance is compulsory in the practical laboratory exercises of the courses or in language courses.

§ 8 Weighting of Module Examinations and Average Grade

To determine the overall grade of the final examination pursuant to § 26 Paragraph 2 of the PO-A, the average grade of the graded module examinations, weighted with the credit points, must be calculated. The weighting factors for the graded module examinations are listed in Appendix 4.

Final provisions

§ 9 Entry into Force and Publication, Transitional Provisions

(1) These regulations shall enter into force with effect from the winter semester 2023/24. They shall be published in the Official Announcements of Bonn-Rhein-Sieg University of Applied Sciences - Announcement Gazette.

(2) These examination regulations replace all programme-specific regulations of the previous examination regulations of the Master's programme in Biomedical Sciences of the faculty. For the remaining regulations of the previous examination regulations, §29 of the 'General Examination Regulations' shall apply accordingly. For enrolled students who started their studies under a previous examination regulation of the respective degree programme, the examinations according to the respective previous examination regulation shall be offered at least until the fourth semester after the semester in which the course assigned to the examination was offered for the last time. The semester in which the course was last offered counts towards this. Examinations according to old examination regulations will be offered until the summer semester 2026 at the latest. Further details shall be regulated in separate regulations.

(3) Paragraph 2, sentences 1 to 3 and 5 shall apply accordingly in the event that these examination regulations are replaced by subsequent ones or the degree programme is discontinued.

Issued on the basis of the resolution of the Faculty Council of the Faculty of Applied Natural Sciences in Rheinbach on 12.12.2024.

Rheinbach, 12.12.2024

Prof. Dr. Richard Jäger
Dean of the Faculty of Applied Natural Sciences
of the Bonn-Rhein-Sieg University of Applied Sciences

Annexes

Appendix 1 - List of graded and ungraded modules with details of the language of instruction, the semester hours per week (SWS) and ECTS

| Module | Language of Instruction | Extent in semester hours per week | ECTS | Module examination |
|----------------------------------|-------------------------|-----------------------------------|------|--------------------|
| Monitoring of Clinical Trials | English | 6 | 8 | Graded |
| Pharmacology/Toxicology | English | 6 | 8 | Graded |
| Clinical Chemistry | English | 6 | 8 | Graded |
| Elective Course 1 | English/ German | 3 | 3 | Ungraded |
| Elective Course 2 | English/ German | 3 | 3 | Ungraded |
| Virology | English | 6 | 8 | Graded |
| Medical Proteomics | English | 6 | 8 | Graded |
| Neurobiology | English | 6 | 8 | Graded |
| Elective Course 3 | English/ German | 3 | 3 | Ungraded |
| Elective Course 4 | English/ German | 3 | 3 | Ungraded |
| Pathophysiology | English | 6 | 8 | Graded |
| Human Genetics | English | 6 | 8 | Graded |
| Advanced and Clinical Immunology | English | 6 | 8 | Graded |
| Elective Course 5 | English/ German | 3 | 3 | Ungraded |
| Elective Course 6 | English/ German | 3 | 3 | Ungraded |

Appendix 2 - Study plan

| SEM | ECTS | Modules | | | | |
|-----|------|--|-------------------------------------|--|-----------------------------|-----------------------------|
| 1. | 30 | Monitoring of Clinical Trials 8 ECTS | Pharmacology / Toxicology 8 ECTS | Clinical Chemistry 8 ECTS | Elective Course 1 3 ECTS | Elective Course 2 3 ECTS |
| 2. | 30 | Virology 8 ECTS | Neurobiology 8 ECTS | Medical Proteomics 8 ECTS | Elective Course 3 3 ECTS | Elective Course 4 3 ECTS |
| 3. | 30 | Pathophysiology 8 ECTS | Human Genetics 8 ECTS | Advanced and Clinical Immunology 8 ECTS | Elective Course 5 3 ECTS | Elective Course 6 3 ECTS |
| 4. | 30 | MSc Thesis including Colloquium 30 ECTS | | | | |

Appendix 3 - Curriculum

| Module Nr. | Module | Type ¹ | 1 | | | 2 | | | 3 | | | 4 | | | Total | |
|------------|----------------------------------|-------------------|----|---|---|----|---|---|----|---|---|---|---|---|-------|------|
| | | | L | S | P | L | S | P | L | S | P | L | S | P | SWS | ECTS |
| 1 | Monitoring of Clinical Trials | C | 2 | 2 | 2 | | | | | | | | | | 6 | 8 |
| 2 | Pharmacology/Toxicology | C | 2 | 2 | 2 | | | | | | | | | | 6 | 8 |
| 3 | Clinical Chemistry | C | 3 | 1 | 2 | | | | | | | | | | 6 | 8 |
| 4 | Elective Course 1 | E | 1 | 1 | 1 | | | | | | | | | | 3 | 3 |
| 5 | Elective Course 2 | E | 1 | 1 | 1 | | | | | | | | | | 3 | 3 |
| 6 | Virology | C | | | | 2 | 2 | 2 | | | | | | | 6 | 8 |
| 7 | Neurobiology | C | | | | 2 | 2 | 2 | | | | | | | 6 | 8 |
| 8 | Medical Proteomics | C | | | | 2 | 2 | 2 | | | | | | | 6 | 8 |
| 9 | Elective Course 3 | E | | | | 1 | 1 | 1 | | | | | | | 3 | 3 |
| 19 | Elective Course 4 | E | | | | 1 | 1 | 1 | | | | | | | 3 | 3 |
| 10 | Pathophysiology | C | | | | | | | 2 | 2 | 2 | | | | 6 | 8 |
| 11 | Human Genetics | C | | | | | | | 2 | 2 | 2 | | | | 6 | 8 |
| 12 | Advanced and Clinical Immunology | C | | | | | | | 2 | 2 | 2 | | | | 6 | 8 |
| 13 | Elective Course 5 | E | | | | | | | 1 | 1 | 1 | | | | 3 | 3 |
| 14 | Elective Course 6 | E | | | | | | | 1 | 1 | 1 | | | | 3 | 3 |
| 15 | Master Thesis and Colloquium | | | | | | | | | | | | | | | 30 |
| | | | 9 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 72 | |
| | Hours per semester | | 24 | | | 24 | | | 24 | | | | | | | |
| | Total ECTS | | | | | | | | | | | | | | | 120 |

¹ C, compulsory module; E, elective course, where division of the 3 SWS into lecture (L), seminar-based teaching (S) and practical training (P) may vary.

Appendix 4: Weighting of graded module examinations according to ECTS for calculating the overall grade

| Module | Credit Points (ECTS) | Weighting factor for the overall Master's grade |
|----------------------------------|-----------------------------|--|
| Monitoring of Clinical Trials | 8 | 8/72 |
| Pharmacology/Toxicology | 8 | 8/72 |
| Clinical Chemistry | 8 | 8/72 |
| Virology | 8 | 8/72 |
| Neurobiology | 8 | 8/72 |
| Medical Proteomics | 8 | 8/72 |
| Pathophysiology | 8 | 8/72 |
| Human Genetics | 8 | 8/72 |
| Advanced and Clinical Immunology | 8 | 8/72 |