The translation of this document was provided by the organizers of the M.Sc. Neurosciences as an additional reference for the students. Note that the legally relevant document is the German version; please refer to this German version or contact the organizers of the study programme if you are unsure about a certain regulation.

Subject-Specific Examination Regulations applicable to the M. Sc. Graduate Programme Master of Neurosciences at the University of Bremen

of April 12, 2023, corrected

In its session on April 12, 2023, the Faculty Council of Faculty 2 (Biology/Chemistry) decided on the following examination regulations in accordance with Article 87 Paragraph 1 No. 2 of the legislation governing higher education in the State of Bremen (BremHG) in conjunction with Article § 62 BremHG in its version published on May 9, 2007 (Bremen Law Journal, Page 339), last amended by law from February 28, 2023 (Bremen Law Journal, Page 68):

These subject-specific examination regulations apply along with the General Part of the Examination Regulations for Master Study Courses (AT MPO) at the University of Bremen from January 27, 2010 in their respectively valid version.

§ 1
Duration of Study and Degree

(1) To successfully complete the “Neurosciences” Master Study Course a total of 120 credit points (CP) according to the European credit point system must be acquired. This is equivalent to a prescribed period of study of four semesters.

(2) The academic degree

“Master of Science”
(abbreviated M. Sc.)

will be conferred on the basis of the passed Master’s examination.

§ 2

Study Structure, Modules and Credit Points

(1) The Master Study Course “Neurosciences“ is studied according to article 4 paragraph 1 of the General Part of the Examination Regulations for Master Study Courses (AT MPO).

(2) The Study Programme is structured as follows:

- Master’s Thesis with a total of 27 CP;
- Fundamental Courses with mandatory modules with a total of 30 CP and
- Research Training with mandatory modules with a total of 33 CP;
- Specialization with elective modules with a total of 3 CP;
- Advanced Studies with elective courses with a total of 27 CP.

(3) Appendix 1 presents the recommended course of study, appendix 2 regulates the required examination achievements.

(4) Modules are carried out as compulsory or as compulsory elective or elective modules. According to § 5 paragraph 3 of the General Part of the Examination Regulations for Master Study Courses (AT MPO), up to 45 CP can be achieved in the elective area (Advanced Studies), of which a total of 27 CP from the three best-graded modules (9 CP each) flow into the Master's examination.

(5) The compulsory, compulsory elective or elective modules of the curriculum will at least be offered in an annual cycle.

(6) Compulsory, compulsory elective or elective modules will be conducted in English.

(7) The lectures of the individual modules will be indicated in the description of the modules.

(8) Lectures and courses will be conducted according to article 6 paragraph 1 of the General Part of the Examination Regulations for Master Study Courses (AT MPO).

(9) The M. Sc. Graduate Programme "Neurosciences" contains modules with the compulsory elective option of a practical component. Students can apply to the examination board to carry out this practical part as an intern, integrated into an external research group. The learning objectives and teaching content listed in the module description must be implemented. Details are regulated in the corresponding module description; the forms of examination defined therein apply unchanged. The modules affected by this are Master’s Thesis, Lab Project 1 and Lab Project 2.

§ 3

Examinations

(1) Examinations will be conducted pursuant to article 8 et seqq. of the General Part of the Examination Regulations (AT MPO) and the regulations of the University of Bremen for the conduct of electronic examinations (DigiPrüfO UB/Digitalprüfungsordnung) in the currently valid versions. In addition, examinations can take place in the forms listed in Annex 3. In exceptional cases the examination board may approve other examination forms upon application of an examiner.

(2) A re-examination may take place in a different form than originally conducted in accordance with § 20 paragraph 4 of the General Part of the Examination Regulations for Master Study Courses (AT MPO).

(3) Processing deadlines and scope of examination requirements will be communicated to the student body at the beginning of a module.

(4) For some modules, a preliminary examination is required in accordance with § 5 paragraph 10 of the General Part of the Examination Regulations for Master Study Courses (AT MPO) for reasons of animal safety. This preliminary examination consists of a selection of examinations of the module Laboratory Animal Science and must be proven before the start of the practical laboratory work of the following modules: Behavioral Pharmacology, Neuro- and Electrophysiology, Optogenetics and Neuroscience Methods and Neuronal Networks.

(5) The compensation principle according to § 5 paragraph 8 of the General Part of the Examination Regulations for Master Study Courses (AT MPO) is not applied.

§ 4

Recognition and Crediting

The recognition or crediting of achievements is carried out in accordance with § 22 of the General Part of the Examination Regulations for Master Study Courses (AT MPO) in the currently valid version.

§ 5

Admission Requirements for Modules

Apart from within the framework of § 6 paragraph 2, there are no admission requirements for modules.

§ 6

Module Master's Thesis (and Colloquium)

(1) The module Master's Thesis (27 CP) comprises the Master's Thesis with a total of 27 CP including a colloquium.

(2) On condition that 60 credit points are achieved the application for the acceptance of the Master's Thesis (including colloquium) can be presented. The following achievements must have been made:

a) the compulsory modules Concepts and Principles of Neuroscience, Information Processing in the Brain – from Synapses to Networks and Theoretical Neuroscience and Methods;

b) at least one of the compulsory modules Lab Project 1 or Lab Project 2;

c) at least one of the compulsory elective modules Advanced Programming: Data Analysis and Modeling or Laboratory Animal Science.

(3) The time given to work on the Master's Thesis amounts to 24 weeks. Upon application, the examination board may grant a single maximum extension of eight weeks..

(4) The Master's Thesis may be produced as individual work performance or in teamwork including up to three persons provided that the contribution of each member is clearly recognizable, delimitable, and assessable.

(5) The Master's Thesis is to be written in English..

(6) A Master's Thesis Colloquium shall be held. The Master's Thesis and the colloquium establish a single mark to which the Master's Thesis contributes 75 % and the colloquium 25%.

§ 7

Overall Mark of the Master Degree Examination

(1) The overall grade is formed from the module grades weighted with credit points. Ungraded modules are not taken into account when calculating the grade.

(2) The grade of the module Master's thesis (including colloquium) is included in the calculation with a weighting of 40 %, the other graded modules together make up 60 % of the overall grade.

§ 8

Scope of application and entry into force

(1) These examination regulations enter into force after their approval by the President of the University of Bremen on October 1, 2023. They will be published in the official law journal of the Free Hanseatic City of Bremen. They apply to all students who are enrolled in the “Neurosciences” Master`s Degree Course from the winter semester of 2023/24 onward.

(2) Students who started their studies before the winter semester 2023/24 can change to the present examination regulations upon application to the responsible examination board. The application must be submitted by 15 November 2023. The examination board decides on the recognition of achievements according to individual circumstances.

(3) The examination regulations for the Master's degree program “Neurosciences” of June 3, 2015 shall expire on September 30, 2027. Students who have not completed their studies by September 30, 2027 will switch to the present examination regulations. The examination board decides on the recognition of achievements according to individual circumstances.

Approved in Bremen, on May 9, 2023

The President of the University of Bremen

Appendices:
Appendix 1: Study Structure of the Master`s Degree Program “Neurosciences”
Appendix 2: Modules and Examination Requirements
Appendix 3: Further Forms of Examination

Appendix 1: Study Structure of the Graduate Programme „Neurosciences“

The following sequence of modules is recommended. Students may, however, perform the modules in a different order.

		Fundamental Courses, 30 CP			**Research Training, 33 CP**		**Masters Thesis, 27 CP**	**Specialization, 3 CP**	**Advanced Studies, 27 CP**	**∑ 120 CP**
		Compulsory Modules incl. Module Master Thesis, 90 CP						Compulsory Elective Modules, 3 CP	Elective Modules, 27 CP	
1st year	**1st Sem.**	MN-F1, Concepts and Principles of Neuroscience, 9 CP	MN-F2, Information Processing in the Brain – from Synapses to Networks, 9 CP	MN-F3, Theoretical Neuroscience and Methods, 9 CP				MN-S1, Advanced Programming: Data Analysis and Modeling, or MN-S2, Laboratory Animal Science, 3 CP		30
	2nd Sem.		MN-CS, Complementary Skills, 3 CP						Elective Modules according to Appendix 2.5, 27 CP	30
2nd year	**3rd Sem.**				MN-Lab1, Lab Project 1, 15 CP	MN-Lab2, Lab Project 2, 15 CP				30
	4th Sem.				MN-MICO, Mind Conference, 3 CP		MN-MAS, Module Masters Thesis (incl. Colloquium), 27 CP			30

CP: Credit Points, Sem.: Semester

Appendix 2: Modules and Examination Requirements

2.1 Masters Thesis, 27 CP

Code	Title of Module	Type of module C/CE/E	CP	ME/PE/CE	Distribution of CP for PE	EA/SA (number)
MN-MAS	Module Masters Thesis (including Colloquium)	C	27	ME		EA: 2 SA: 0

C: Compulsory Module, CE: Compulsory Elective Module, E: Elective Module; CP: Credit Points; ME: Module Examination, PE: Partial Examination, CE: Combined Examination; EA: Examination Achievements (= graded), SA: Study achievements (= non-graded)

2.2 Fundamental Courses, Compulsory Modules, 30 CP

Code	Title of Module	Type of module C/CE/E	CP	ME/PE/CE	Distribution of CP for PE	EA/SA (number)
MN-F1	Concepts and Principles of Neuroscience	C	9	ME		EA: 1 SA: 0
MN-F2	Information Processing in the Brain – from Synapses to Networks	C	9	CE		EA: 1 SA: 2
MN-F3	Theoretical Neuroscience and Methods	C	9	CE		EA: 1 SA: 3
MN-CS	Complementary Skills	C	3	ME		EA: 0 SA: 1

C: Compulsory Module, CE: Compulsory Elective Module, E: Elective Module; CP: Credit Points; ME: Module Examination, PE: Partial Examination, CE: Combined Examination; EA: Examination Achievements (= graded), SA: Study achievements (= non-graded)

2.3 Research Training, Compulsory Modules, 33 CP

Code	Title of module	Type of module C/CE/E	CP	ME/PE/CE	Distribution of CP for PE	EA/SA (number)
MN-LAB1	Lab Project 1	C	15	ME		EA: 1 SA: 0
MN-LAB2	Lab Project 2	C	15	ME		EA: 1 SA: 0
MN-MICO	Mind Conference	C	3	ME		EA: 0 SA: 1

C: Compulsory Module, CE: Compulsory Elective Module, E: Elective Module; CP: Credit Points; ME: Module Examination, PE: Partial Examination, CE: Combined Examination; EA: Examination Achievements (= graded), SA: Study achievements (= non-graded)

2.4 Specialization, Compulsory Elective Modules, 3 CP

Code	Title of Module	Type of module C/CE/E	CP	ME/PE/CE	Distribution of CP for PE	EA/SA (number)
MN-S1	Advanced Programming: Data Analysis and Modeling	CE	3	CE		EA: 0 SA: 2
MN-S2	Laboratory Animal Science	CE	3	CE		EA: 2 SA: 0

C: Compulsory Module, CE: Compulsory Elective Module, E: Elective Module; CP: Credit Points; ME: Module Examination, PE: Partial Examination, CE: Combined Examination; EA: Examination Achievements (= graded), SA: Study achievements (= non-graded)

2.5 Advanced Studies, Elective Modules: 27 CP

A selection of elective modules is shown below. The modules in the elective area can be supplemented by decision of the examination board of the Graduate Programme “Neurosciences”before the beginning of the respective semester.

Code	Title of Module	Type of module C/CE/E	CP	ME/PE/CE	Distribution of CP for PE	EA/SA (number)
MN-BP	Behavioral Pharmacology	E	9	CE (with PRE)		EA: 1 SA: 0
MN-NE	Neuro- and Electrophysiology	E	9	CE (with PRE)		EA: 2 SA: 0
MN-ONM	Optogenetics and Neuroscience Methods	E	9	CE (with PRE)		EA: 2 SA: 0
MN-NN	Neuronal Networks	E	9	CE (with PRE)		EA: 1 SA: 1
MN-CPE	Cognitive Psychology and EEG	E	9	CE		EA: 2 SA: 0
MN-CN	Cognitive Neuroscience	E	9	ME		EA: 1 SA: 0
MN-fMRI	Functional MR Imaging	E	9	CE		EA: 1 SA. 1
MN-BPR	Brain Pattern Recognition	E	9	ME		EA: 1 SA: 0
MN-DSM	Digital Systems Modeling	E	9	CE		EA: 2 SA: 0
MN-NMA	Network Modeling and Analysis	E	9	CE		EA: 1 SA: 1
MN-FML	Fundamentals of Machine Learning	E	9	CE		EA: 1 SA: 1

C: Compulsory Module, CE: Compulsory Elective Module, E: Elective Module; CP: Credit Points; ME: Module Examination, PE: Partial Examination, CE: Combined Examination; PRE: Pre-Requisite for Examination, EA: Examination Achievements (= graded), SA: Study achievements (= non-graded)

Appendix 3: Further examination forms

In addition to the forms according to §§ 8 ff. of the General Part of the Examination Regulations for Master`s Degree Courses (AT MPO), examinations can take place in the forms listed here:

- Protocol: Written description of experiments or task solutions carried out in the course, oriented towards the basics of scientific writing; maximum 10 pages plus appendix.

- Poster presentation: A scientific topic is presented clearly and, if necessary, also graphically in the form of a conference poster.