

**Subject-Specific Examination Regulations applicable to the M. Sc. Graduate  
Programme Master of Neurosciences at the University of Bremen**  
from June 2015

In its session on June 3, 2015, the Faculty Council 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 Article 1 of third higher education reform law from March 24, 2015 (Bremen Law Journal, Page 141):

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. The compulsory part consists of modules with a total number of 93 credit points, an additional 27 credit points have to be achieved in the compulsory optional subjects.

(2) Appendix 1 regulates the required examination achievements and presents the course of study.

(3) All modules will be conducted in English.

(4) The compulsory and compulsory optional modules of the curriculum will be offered in an annual cycle.

(5) The lectures of the individual modules will be indicated in the annual teaching programme and in the description of the modules.

(6) Lectures and courses will be conducted according to article 6 paragraph 1 of the General Part of the Examination Regulations for Master Study Courses or in combination with other teaching forms regulated in this paragraph.

## § 3

### **Examinations**

- (1) Examinations will be conducted pursuant to article 8 et seqq. of the General Part of the Examination Regulations for Master Study Courses. In exceptional cases the examination board may approve other examination forms upon application of the examiner.
- (2) The repetition of examinations not passed may proceed in a form deviating from the first.
- (3) Forms, deadlines and the scope of examination requirements will be communicated to the student body at the beginning of a module.
- (4) Examinations can be conducted in the form of multiple choice questions or e-examinations. Details are set out in Appendix 4.

## § 4

### **Acknowledgement of Study and Examination Achievements**

The acknowledgement of study and examination achievements has to be in accordance with the regulations of article 22 of the General Part of the Examination Regulations for Master Study Courses in their respectively valid version.

## § 5

### **Admission Requirements for Modules**

In order to fulfill the requirements of the animal protection law, module 415 (Laboratory Animal Sciences) has to be passed successfully prior to attending modules 406-408.

## § 6

### **Module Master's Thesis (and Colloquium)**

- (1) The module Master's Thesis (30 credit points) comprises the Master's Thesis with 27 credit points and an accompanying seminar with 3 credit points. Graduation of the accompanying seminar requires a non-graded performance record; graduation of the Master's Thesis requires completion of the thesis itself and passing the Colloquium.
- (2) On condition that 60 credit points are achieved in the compulsory and compulsory optional courses of the master study programme, the application for the acceptance of the Master's Thesis can be presented. The requirements of the compulsory and compulsory optional modules of the first study term (cf. Appendix 1) must be fulfilled.
- (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 four 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. Upon application to the examination board it may be written in German.

(6) A Master's Thesis Colloquium shall be held. A nonvoting student observer shall be present during the colloquium and consultation about the mark. The Master's Thesis and the colloquium establish a single mark to which the Master's Thesis contributes 75 % and the colloquium 25%. The calculation is carried out according to article 16 paragraph 3 of the General Part of the Examination Regulation for Master Study Courses in their respectively valid version.

## § 7

### **Overall Mark of the Master Degree Examination**

The mark of the Master's Thesis and colloquium comprises 40% of the overall mark. The remaining 60% are composed of the marks received for the modules weighted according to the credit points and the courses in which the marked examinations were taken. Non-graded results are not considered in the calculation.

## § 8

### **Entry into Force**

(1) These examination regulations entered into force subsequent to their approval by the President of the University of Bremen on October 1, 2015. They are published in the official law journal of the Free Hanseatic City of Bremen. They apply to all students who, for the first time, are matriculated from the winter semester of 2015/16 onward in the "Neurosciences" Master Study Course.

(2) Students who were matriculated before winter term 2015/16 for the master programme "Neurosciences" will finish their studies according to the examination regulations from October 5, 2011. Students who will not have finished their studies until September 30, 2017, will change at the latest then, upon application earlier, to the present examination regulations. The examination board will decide on the acknowledgement of study achievements in accordance with the individual situation.

(3) With the entry into force of this order the examination regulations for the Master Programme "Neurosciences" from October 5, 2011 will expire. Paragraph 2 remains unaffected by this

Approved in Bremen, on June 23, 2015  
The President of the University of Bremen

### **Appendices:**

Appendix 1: Study Structure

Appendix 2: Modules compulsory optional subjects

Appendix 3: not applicable

Appendix 4: Performance of examinations as multiple choice procedure and ex-examinations

Appendix 5: not applicable

## **Appendix 1: Study Structure**

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

| Module  | C/<br>CO | CP | ME/<br>PE/CE | 1 <sup>st</sup><br>term | 2 <sup>nd</sup><br>term. | 3 <sup>rd</sup><br>term. | 4 <sup>th</sup><br>term |
|---|----------|----|--------------|-------------------------|--------------------------|--------------------------|-------------------------|
| 401-1<br>Cellular and Molecular Neurosciences<br>and Mentoring                | C        | 6  | ME           | x                       |                          |                          |                         |
| 402<br>Systemic Neurosciences   | C        | 6  | ME           | x                       |                          |                          |                         |
| 403-1<br>Theoretical Neurosciences  | C        | 6  | PE           | x (see<br>below)        |                          |                          |                         |
| 404<br>Clinical Neurosciences   | C        | 6  | ME           | x                       |                          |                          |                         |
| 415<br>Laboratory Animal Science  | C        | 3  | ME           | x                       |                          |                          |                         |
|   |          |    |              | x                       |                          |                          |                         |
| 501<br>Lab Rotation 1   | C        | 15 | ME           |                         |                          | x                        |                         |
| 502<br>Lab Rotation 2   | C        | 15 | ME           |                         |                          | x                        |                         |
| 414 Programming   | C        | 3  | ME           | x                       |                          |                          |                         |
| Master Thesis and Colloquium  | C        | 30 | CE           |                         |                          |                          | x                       |
| Introductory week   | C        | 3  | ME*          |                         | x                        |                          |                         |
| Compulsory Optional Modules with 27<br>credit points in total, see Appendix 2 |          |    |              |                         | x                        |                          |                         |

CP: Credit Points, ME: Module Examination, PE: Partial Examination, CE: Combined Examination (consisting of achievements for examination and study), C: Compulsory Module, CO: Compulsory Optional Modules, O: Optional Module

\* A (non-graded) study achievement is needed to successfully pass.

### Supplementary Information for Modules with Combined Examination

| Code  | Module                    | CP | ME/PE/CE | Distribution of CP<br>(CE)  | EA/SA<br>(Number) |
|-------|---------------------------|----|----------|---|-------------------|
| 403-1 | Theoretical Neurosciences | 6  | PE       | a) Computational Neuroscience I, 2 CP                               | 1 EA              |
|       |                           |    |          | b) Statistical Methods, 2 CP  | 1 EA              |
|       |                           |    |          | c) Computational Neuroscience II, 2 CP<br>(in 2 <sup>nd</sup> term) | 1 EA              |

Code: Code Number, CP: Credit Points, ME: Module Examination, PE: Partial Examination, CE: Combined Examination (consisting of achievements for examination and study), EA: Examination Achievement (= graded); SA: Study Achievement (= non-graded)

## **Appendix 2: Compulsory Optional Modules**

Within the compulsory optional modules 3 modules with totally 27 CP have to be successfully passed

|     |  |    |   |    |
|-----|--|----|---|----|
| 406 | Neuro- and Electrophysiology                         | CE | 9 | ME |
| 407 | Neuropharmacology II                                 | CE | 9 | ME |
| 408 | Experimental Neuroanatomy and Behavioural Physiology | CE | 9 | ME |
| 409 | Psychophysics and Human Neurophysiology              | CE | 9 | ME |
| 410 | Experimental Neuropsychology                         | CE | 9 | ME |
| 411 | Cognitive Psychology & Electroencephalography        | CE | 9 | ME |
| 412 | Structural & Functional Neuroimaging                 | CE | 9 | ME |
| 413 | Neurophysics   | CE | 9 | ME |

## **Appendix 3: Further examination forms**

Not applicable

**Appendix 4: Performance of examinations by multiple choice questions und “e-examinations“**

### **§ 1**

#### **Procedure for Multiple Choice Questions**

(1) A multiple choice examination means that the requirements for passing the examination can only be achieved by marking or assignment of the right or wrong answers. Multiple choice examinations and examination questions are only permissible, if they are able to prove that the candidates can master the contents and methods of the module in its essential context and apply their knowledge and skills acquired. The multiple choice test has to be prepared by an examiner according to article 27 of the General Part of the Examination Regulations for Master Study Courses. The examiner chooses the examination topics, formulates questions and determinates the answering options. Additionally the examiner will develop an evaluation scheme, according to paragraph 4, which will be conducted after the examination. It is permissible to deduct points within an examination question in the multiple choice procedure.

(2) The examination questions have to be unequivocally comprehensible, clearly answerable and also appropriate to assess the candidate's knowledge according to article 1 paragraph 2. The examiner can also create a pool of equivalent examination questions. In the examination students receive different questions from this pool. The questions will be randomly allocated. The equivalence of examination questions must be ensured. The conditions for passing the examination are to be defined in advance. Moreover,

- the choice of questions
- the model solution and
- the evaluation scheme according to article 4

have to be defined.

(3) The examination is passed when the candidate has achieved at least 50 % of the maximum amount of points. If the overall average of the points achieved in the examination is below 50 % of the reachable points, the examination will be passed, when the amount of the candidate's

points does not fall below 15 % of the average examination performance of all participants. A grading scheme which only determines an absolute pass mark is not admissible.

(4) Achievements are to be graded as follows: If the required minimum number of the reachable points according to paragraph 3 has been obtained, the grades will be

|                 |                                     |
|-----------------|-------------------------------------|
| “very good”:    | when at least 75 %                  |
| “good”:         | when at least 50 but less than 75 % |
| “satisfactory”: | when at least 25 but less than 50 % |
| “sufficient”:   | when none or less than 25 %         |

of the additionally reachable points have been achieved.

(5) If a multiple choice exam shows a considerable number of errors in specific questions, the examiner will review these questions immediately and prior to announcing the overall results, and check whether they are in compliance with the requirements of paragraph 2 (1). If the review shows errors in the construction of specific questions, they have to be reevaluated or excluded from the overall examination results. The number of examination questions that will be included in the final results has to be reduced accordingly. The reduction of examination questions must not work to the detriment of students. If the number of reachable points in the questions eliminated in the exam exceeds 20 % of the maximum reachable points, the exam has to be repeated. This also applies to examinations in which only one part of the whole examination is constructed as multiple choice test.

(6) If the multiple choice procedure is only part of the examination, this appendix will be valid with exception of article 5 paragraph 5 clause 2 only for the part of the examination concerning the multiple choice procedure.

## § 2

### **Performance of Examinations as „E-examinations“**

(1) The preparation, performance and evaluation of an e-examination are computer-based (except the open questions). An e-examination is permitted, provided it is suitable to prove that the candidates are able to master the contents and methods of the module in its essential context and apply their knowledge and skills acquired; if necessary it can be completed by other examination forms.

(2) E-examinations have to be performed in the presence of a qualified person (protocolist). A protocol shall be drawn which at least records the names of the protocolist and the candidates, begin and end of the examination as well as any special occurrences. It must be ensured that the electronic data can be assigned to the candidates clearly and permanently. In accordance with article 24 paragraph 6 of the General Part of the Examination Regulations for Master Study Courses, candidates have to be granted access to the file of the computer-based examination and their results achieved. The task assignment including the model solution, the grading scheme, the single examination results and the records are to be archived in accordance with the legal requirements.