

At the meeting on 14 July 2015, the Senate of the University of Veterinary Medicine Hannover decided on the following amendments of the regulations on the course of study, examinations and graduation for the PhD order of 25 February 2008, as last amended on 09 February 2012 (184/2012):

**Regulations on the Course of Study, Examinations and Graduation for the PhD Programs with  
a PhD (PhD course of study)  
at the University of Veterinary Medicine Hannover**

**Section One:  
Objectives of the PhD Programs**

**§ 1 Objectives**

(1) The three PhD programs “Animal and Zoonotic Infections”, “Veterinary Medicine and Animal Biology”, and Systems Neuroscience” at the University of Veterinary Medicine Hannover with the objective of graduating with a PhD offer a project orientated course of study in research with the aim of enabling in-depth independent scientific work and an advanced professional qualification for tasks in research or related fields. They should cater for the needs of particularly competent scientific doctoral candidates. A period of study of three to five years applies for the PhD programs.

(2) The PhD program “Systems Neuroscience” is organised by the Centre for Systemic Neurosciences (ZSN) Hannover, which comprises working groups of the University of Veterinary Medicine Hannover, the Hannover Medical School, Leibniz University Hannover and the University of Music, Drama and Media Hannover jointly with the aim of graduating with a PhD at the University of Veterinary Medicine Hannover.

(3) After successful completion of the PhD program and the taking of the PhD examination, this is followed by the granting of the academic degree of Doctor of Philosophy (PhD) by the University of Veterinary Medicine Hannover.

**Section Two:  
Admission and Enrolment Requirements**

**§ 2 Admission Requirements**

(1) The PhD programs are open to persons who have successfully completed a university course of study in veterinary medicine, medicine or dentistry (state examination), biology, biochemistry, chemistry or in another natural sciences subject (diploma, master’s). A successfully completed corresponding degree in the named fields abroad can be recognised by the PhD commission as being equivalent.

(2) The first section of a university master’s program can be recognised by the responsible PhD commission on request as sufficient for entrance requirement, if the student has achieved excellent performance in this section and the responsible student committee for the master’s examination has recommended the validation.

(3) Applicants should be able to provide evidence of outstanding academic achievement. Their previous career should reflect their particular skills and motivation for scientific work. The PhD commission responsible decides the aptitude of the applicants.

(4) Besonders qualifizierte Absolventinnen oder Absolventen eines mindestens achtsemestrigen Fachhochschulstudiums (Diplom/Master) können auf begründeten Antrag an die zuständige PhD-Kommission zugelassen werden. Diese kann Kenntnissnachweise verlangen oder Studienauflagen erteilen.

### § 3 Admission to PhD Program

(1) The number of participants admitted from the applicants is fixed for each program as a rule at 20 per year. The selection of participants is made by the appropriate PhD commission (§ 4). The course of study starts once a year with the beginning of the winter term.

(2) Admission to the PhD program takes into account the overall final examination results as well as the degree of motivation. The PhD commission responsible may interview applicants in order to gain more insight into their particular skills and motivation.

Furthermore, the quality of the proposed project, allowing for the working conditions in the working group as well as the quality of supervision will also be taken into consideration on admission. The commission responsible may request an external evaluation of the project.

(3) Application documents are to be submitted to the chairperson of the respective PhD commission. These include the following:

- an informal letter of application for the chosen PhD program providing evidence of suitability and motivation for this PhD program, scientific fields of interest and further perspectives for the individual professional career;
- a curriculum vitae und certificates as well as information about the knowledge in English or German. German courses are if appropriate recommended to applicants from non-German speaking countries.

(4) For deciding whether the student is to be admitted into the PhD program the following documents have to be submitted to the respective PhD commission:

- a letter of recommendation by the supervisor (§ 4, (4) including the topic of the research project, confirmation of the scientific supervision, of the place of employment, details concerning funding of the research work and two scientists who should be proposed as external adviser in the tutorial group (§ 6);
- a description of the planned research project with the most important aspects of the current state of research and a work schedule of the project with the title in German and in English (after consulting the supervisor); in doing so it should be emphasised that it is a matter of a sophisticated research project which expects an important scientific contribution;
- optional the naming of the scientific specialist area in which the PhD degree should be acquired; this specialist area must be covered by the University of Veterinary Medicine Hannover or in cooperation study courses by one of the involved working groups.

### Section Three: PhD Commissions

#### § 4 PhD Commissions

(1) The PhD commissions appointed by the Senate of the University of Veterinary Medicine are responsible for the respective PhD programs concerning regulations of admission, enrolment, study program, examination and graduation.

(2) The PhD commission for the program “Veterinary Research and Animal Biology” consists of the Vice-President for Research, as well as seven other representatives of the University of Veterinary Medicine Hannover, specifically five faculty members, one postdoctoral research assistant and a PhD student (in an advisory capacity).

The members of the PhD commission are appointed by the Senate for the duration of their term in office according to a proposal of the PhD commission; the PhD students elect their own representative. The faculty members as well as the postdoctoral research assistant of the PhD commission should come from different university institutes and departments. The commission is constituted by the Vice-President for Research and elects one of its faculty members as chairperson.

(3) The PhD commission for the program “Systems Neuroscience” consists of eight members, six of them faculty members of the working groups of the ZSN, a postdoctoral research assistant and a PhD student (in an advisory capacity). The members of this PhD commission are appointed by the Senate for the duration of their term in office according to a proposal of the board of the ZSN; the PhD students elect their own representative. The faculty members, as well as the post-doctoral research assistant of the PhD commission should come from the various universities involved in the ZSN. The commission is constituted by the chairperson of the ZSN and elects one of its faculty members as chairperson.

(4) The PhD commission for the program “Animal and Zoonotic Infections” consists of the Vice-President for Research, as well as seven other representatives of the University of Veterinary Medicine Hannover, specifically five faculty members, one postdoctoral research assistant and a PhD student (in an advisory capacity).

The members of the PhD commission are appointed by the Senate for the duration of their term in office according to a proposal of the PhD commission; the PhD students elect their own representative. The faculty members as well as the postdoctoral research assistant of the PhD commission should come from different university institutes and departments. The commission is constituted by the Vice-President for Research and elects one of its faculty members as chairperson.

#### **Section Four: Curriculum**

##### **§ 5 Course of Study**

(1) The course of study is divided into experimental research work and project related as well as interdisciplinary research orientated courses and seminars.

(2) The curriculum is fixed and published by the responsible PhD commissions after consulting institutes and departments involved in the PhD program.

(3) The courses are mostly run by faculty members of the University of Veterinary Medicine or of the ZSN and supplemented by guest scientists. They should be held categorically in English. Postgraduate program courses can be part of a PhD program. Suitable courses from other scientific institutes can also be attended after approval by the PhD commission. At the same time the students should also be independently active, e.g. by way of presentations or doctorate programs. Academic accomplishment in the courses of the PhD program is checked by the respective lecturer.

(4) The PhD students compile their individual course of study in accordance with the curriculum of the responsible PhD commission in consultation with their supervisors. The course of study comprises one half of compulsory (interdisciplinary and project-related courses) and one half of elective courses.

##### **§ 6 Supervision**

(1) For each PhD student the PhD commission responsible appoints a three-person Supervision Group with the following tasks:

1. Mentoring of and individual expert advice for the PhD student during the entire PhD program.
2. Conclusion of a written agreement of supervision.
3. Evaluation of the PhD student during the course of study.
4. Lending planning support in publishing activities.
5. Within eight weeks after nomination of the members of the Supervision Group a first briefing with the student should be conducted. A protocol of the meeting should be carried out.

6. The Supervision Group conducts at least once a year a briefing with the PhD student until submission of the thesis. Each briefing should be recorded.

(2) The Supervision Group appointed by the PhD commission for the program "Veterinary Research and Animal Biology" and "Animal and Zoonotic Infections" comprises a full-time member of the faculty (supervisor), the respective specialist tutor at the University of Veterinary Medicine (member of teaching staff), as well as a professionally competent scientist outside the university (external supervisor). The members of the Supervision Groups must be qualified as a professor or show proof of a comparable scientific qualification. The Supervision Group has to make sure that from the very beginning the PhD student abides by the rules of good scientific practice.

(3) The Supervision Group employed by the PhD commission for the program "Systems Neuroscience" comprises the respective specialist tutor (supervisor) of the ZSN, as well as two further members of ZSN, who must not be members of the working group of the supervisor. At least one member of the Supervision Group must come from another institution than the main supervisor (external supervisor). The members of the Supervision Group must be qualified as a professor or show proof of a comparable scientific qualification. The Supervision Group has to make sure that from the very beginning the PhD student abides by the rules of good scientific practice.

(4) In case of a joint conferral of a doctorate with a university at home or abroad or with other research institutes which are not involved in the PhD programs of the University of Veterinary Medicine Hannover, the PhD commission is authorised to reach settlement in individual cases. Concerning the requirements these must not be inferior to this PhD regulation.

(5) In the case of interdisciplinary research projects the PhD commission can in agreement with the first supervisor appoint a second supervisor who must have a close specialist relationship to the theme of the project. The commission confirms the intended supervisor for the project and appoints the Supervision Group.

(6) Within the framework of the research project a defined theme as regards content should be worked on with appropriate methods, so that with realistic chance of success a scientific accrual of knowledge occurs and the achieved results can be published in international journals with a referee system. The supervisor must ensure and the PhD commission has to state that the student will not be burdened with tasks unrelated to the qualification for a PhD. This does not apply to a combined PhD/Residency-Program.

(7) The main supervisor is responsible for funding the research project and the personal funding of the PhD students assigned to them. As far as funding is made available for PhD scholarships, its distribution is determined by the respective PhD commission.

(8) Should after one year into the study a successful completion of the course of study not be foreseeable due to the student's previous performance the Supervision Group can suggest the premature ending of the PhD study course.

(9) If the premature discontinuance of a project is impending for these or other reasons, a mutual meeting between the PhD student, the Supervision Group and a member of the PhD commission takes place. The PhD commission responsible decides the further course of action and if necessary exmatriculation of the student.

(10) After a successfully completed study course the supervision ends when the PhD student has passed the PhD examination. The doctorate has to be completed within no more than five years after commencing the PhD course. In well-founded cases the PhD commission may grant an extension.

## **§ 7 Scientific Colloquia**

Once a year, the PhD commission invites the PhD students to participate in a colloquium open to university members. The students give either a lecture or a poster presentation about the progress made in their research. The form and content of the presentations are evaluated.

## Section Five: Examinations

### § 8 Prerequisites for admission to the PhD examination

(1) For admission to the PhD examination the PhD student must provide the following documents:

1. Evidence of regular and successful participation in all courses and seminars as specified in the curriculum;  
2. at least one submitted publication in recognised scientific journals with peer review as first author; in well-founded cases the PhD commission may deviate from this rule.

3. A PhD thesis written by the student in German or English on the research project completed during the PhD study course. The thesis contains an introduction, methods, results, discussion, a summary in both German and English and a reference list in printed and electronic form. The thesis must contribute considerably to the chosen specialism of the research project.

4. Alternatively, the student may submit a cumulative thesis in German or English if this comprises at least two publications in international peer-reviewed scientific journals bearing the name of the student as the first author; works that have been accepted for publication are considered as published. Information must be provided explaining the student's particular contribution to the scientific design, laboratory work, evaluation and scientific writing. These publications must be thematically related; when submitted as a cumulative thesis under a single title they must be supplemented with a comprehensive summary of the research topic and a discussion of the results in German or English.

(2) A separate statement has to be submitted should the Dr. rer. nat. (natural sciences study course) be strived for. In this case the Dr. rer. nat. rules apply.

(3) The entering of the field of study in accordance with § 3 (4) on the final examination certificate has to be requested in writing to the PhD commission.

### § 9a Evaluation of the written thesis for obtaining the degree PhD

(1) Final evaluation of the thesis is the responsibility of the PhD commission, to which the Supervision Group submits a report.

The PhD commission also requests submission of an external evaluation. All reports must be written independently of each other and should be submitted within four weeks after receipt of the thesis. Both reports must contain an evaluation of the thesis with the following grading:

"Very good" (= 1)

"Good" (= 2)

"Sufficient" (= 3)

"Not sufficient" (= 4).

Theses that are worthy of distinction can be evaluated with the grade *summa cum laude*. If the judgement differs, the commission can request a further evaluation.

(2) If on the basis of the evaluations the PhD commission comes to the conclusion that the thesis is not satisfactory because of numerous shortcomings, then the criteria for admission to the final PhD examination will not be met; in this case exmatriculation of the PhD student takes place.

### § 9b Evaluation of the written thesis for obtaining the degree Dr. rer. nat.

Evaluation of the written thesis for obtaining the degree Dr. rer. nat. is graded in accordance with the promotion regulation for natural sciences of the University of Veterinary Medicine Hannover.

## § 10 Defence and overall assessment

(1) The defence (*Disputation*), open to all members of the University, consists of a lecture given by the PhD student on the research project in English. The lecture must last at least 30 minutes and should be followed by a public discussion of at least 15 minutes. For the defence the PhD commission extends the Supervision Group to include the external expert of the written PhD examination. All members of the Supervision Group are entitled to vote.

(2) If the student fails the PhD examination, it can be repeated once at a date scheduled by the Supervision Group at least three months, but no more than six months later. A second failure is final. In this case the PhD student is exmatriculated. The PhD commission is informed of the results of the final examination.

(3) After the defence the PhD commission evaluates the overall quality of the thesis (§§ 9a, 9b) and defence (§ 10). The overall assessment comprises two-third of the evaluation of the written thesis and one-third of the evaluation of the oral examination.

The grade will be at an average of

- 1.0: very good with distinction (*summa cum laude*) if the conditions of section (4) are met,
- 1.0 to 1.4: very good (*magna cum laude*),
- 1.5 to 2.4: good (*cum laude*),
- over 2.4: sufficient (*rite*).

(4) The PhD commission can award to excellent theses distinction, “*summa cum laude*” if (I) the thesis has been published completely or in part until the date of submission in at least one publication in internationally recognized peer-reviewed scientific journals bearing the name of the student as the first author, (II) the overall assessment is and (III) the distinction *summa cum laude* is given in the written evaluations by the experts.

(5) The overall evaluation of students striving for the title of Dr. rer. nat., according to § 12 (3) will be made in accordance with the regulations for the corresponding doctoral degree of the University of Veterinary Medicine Hannover.

## § 11 Duplication of the PhD Thesis

The student is obliged to submit the written PhD thesis in digital form as a CD as well as to submit three university printed copies made from this CD to the University. The PhD commission may require that amendments in content be made before the thesis is copied. Alternatively, three copies printed by a publisher may be submitted instead of the university printed copies. Publication of the printed copies takes place immediately after the promotion ceremony. Publication of the printed and/or digital form of the PhD thesis can stay by request to the respective PhD commission for a maximum duration of six months.

## § 12 Awarding of the Academic Degree of Doctor of Philosophy (PhD)

(1) When the student has successfully passed the final PhD examination, the academic degree of Doctor of Philosophy (PhD) is awarded by the University of Veterinary Medicine Hannover. A corresponding certificate according to Appendix 1 and 2 is issued in German and English. The award allows the student to the academic title of PhD.

(2) According to § 17 of the Dr. med. vet. doctoral regulation of the University of Veterinary Medicine Hannover it is possible for holder of a PhD degree awarded by the University of Veterinary Medicine Hannover to apply for the degree “*Doctor medicinae veterinariae*” (Dr. med. vet.). This requires the fulfilment of the prerequisites defined in § 2 no. 1, 2 of the Dr. med. vet. doctoral regulations of the University of Veterinary Medicine Hannover.

(3) Graduates who prior to the PhD program have completed a natural science course of study may upon application at the time of submitting the thesis elect to be awarded the title of Dr. rer. nat. in accordance with the doctoral regulations of the University of Veterinary Medicine Hannover. The corresponding certificate will be issued in accordance with the doctoral regulations. The awarding of the Dr. rer. nat. requires in addition, that in the doctoral procedure one of the examiners comes from a natural science faculty.

### **§ 13 Annulment of Graduation**

The Senate is entitled to declare a graduation invalid if serious mistakes have been made in compliance with the admission requirements for the PhD course of study or in case of fraud committed by the student.

### **§ 14 Withdrawal of the Academic Degree of PhD**

The PhD degree may be withdrawn by the Senate of the University of Veterinary Medicine in accordance with the current legal regulations.

### **§ 15 Interim Regulations**

This regulation applies to those students who begin their studies after these PhD regulations came into effect. Students who started before that time can choose to study according to the current or previous regulations.

### **§ 16 Final Regulations**

Amendments to these regulations require the agreement of all PhD commissions and the Graduate School of the University of Veterinary Medicine Hannover.

### **§ 17 Coming into Force**

These regulations approved by the Senate are herewith published in the „Verkündungsblatt“ of the University of Veterinary Medicine Hannover and go into effect on the following day.

Hannover, 10.08.2015

The president  
Dr. Dr. h. c. mult. Gerhard Greif