

At its meeting on 14 July 2020, the Senate of the University of Veterinary Medicine Hannover decided on major changes in the regulations of 10 August 2015 on the course of study, examinations and graduation for the PhD. The new regulations are published herewith:

**Regulations on the Course of Study, Examinations and Graduation for the Doctoral Programs
Leading to the PhD Degree (PhD Programs)
at the University of Veterinary Medicine Hannover**

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

§ 1 General Provisions and 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 (TiHo) comprise project orientated training leading to a PhD degree and enabling students to conduct in-depth independent scientific work. This is an advanced professional qualification for tasks in research or related fields. These programs are designed to serve the needs of particularly competent young scientists. The PhD programs involve three to five years of study.

(2) The doctoral program “Systems Neuroscience” is organised by the Center for Systems Neuroscience (ZSN) Hannover, which comprises joint 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.

(3) Upon successful completion of the PhD program the academic degree of Doctor of Philosophy (PhD) will be awarded by the TiHo.

**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 another natural science (diploma, master’s). A corresponding degree in the named fields successfully completed abroad can be recognised by the PhD commission as being equivalent.

(2) The first section of a university master’s program can upon request be recognised by the responsible PhD commission as sufficient for the 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 careers should reflect their particular skills and motivation for scientific work. The PhD commission responsible decides on the suitability of the applicants.

(4) Particularly qualified applicants who have completed at a course of study of at least eight semesters at a university of applied sciences can be admitted to the program by applying to the PhD commission in question. This commission can require proof of knowledge or further studies.

§ 3 Admission to the PhD Program

(1) The maximum number of participants admitted is fixed for each program 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 respective PhD commission evaluates the candidate's particular skills and motivation. Furthermore, the quality of the proposed project, the working conditions in the working group, as well as the quality of supervision will also be taken into consideration for admission. The commission responsible will obtain an external evaluation of the project if necessary.

(3) The following application documents are to be submitted to the chairperson of the respective PhD commission:

1. An informal letter of application in English 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.
2. A curriculum vitae und university certificates, proof of the candidate's qualification for university admission, as well as information about the applicant's knowledge of foreign languages.
3. A letter of recommendation from the supervisor including topic of the research project, agreement to provide scientific supervision, confirmation of the place of work, information about financing the research, and two suggestions for members of the supervisory group. Two suggestions may be made for the external evaluation if applicable.
4. A description of the planned research project including a review of the most important aspects of the current state of research and a project work schedule in English. This description should make clear that it is an ambitious project expected to make an important contribution to science.
5. Optionally, a suggestion for the scientific field in which the PhD is to be earned; this field must be represented at the TiHo; in the case of cooperative courses of study, at one of the cooperating working groups.

Section Three: PhD Commissions

§ 4 PhD Commissions

(1) The PhD commissions appointed by the Senate of the TiHo are responsible for the respective PhD programs in regard to regulations of admission, enrolment, study program, examination, and graduation.

(2) The PhD commissions for the programs "Veterinary Research and Animal Biology" and "Animal Biology and Animal Zoonotic Infections" consist of the Vice-President for Research, as well as seven other representatives of the TiHo, including five faculty members, one 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 its term of office according to a proposal of the PhD commission; the PhD students propose their own representative. The faculty members and the postdoctoral research assistant of the PhD commission should come from different university institutes and departments. The commission will be constituted by the Vice President; it selects a faculty member as chairperson.

(3) The PhD commission for the program "Systems Neuroscience" consists of nine members of the working groups of the ZSN, seven of them faculty members; a postdoctoral research assistant; and a PhD student (in an advisory capacity). The members of this PhD commission are appointed by the Senate of the TiHo for the duration of its term according to a proposal of the board of the ZSN; the PhD students suggest one of their group as their representative. The faculty members and the post-doctoral research assistant of the PhD commission should be members of the various universities involved in the ZSN. The commission will be constituted by the chairperson of the ZSN and elects one of its faculty members as chairperson.

Section Four: Curriculum

§ 5 Course of Study

- (1) The curriculum includes an experimental research project and both project related and interdisciplinary courses, seminars and lectures.
- (2) The curriculum is fixed and published by the responsible PhD commissions in consultation with the institutes and departments involved in the PhD program.
- (3) The courses are generally taught by faculty members of the TiHo Hannover and other participating institutions, with involvement of guest scientists. The courses are to be held categorically in English. Courses from a postgraduate program (e.g. DFG Research training groups) can be part of a PhD program. Suitable courses from other scientific institutes can also be attended for credit with the approval by the PhD commission. The students should also be independently active, e.g. by giving lectures or participating in post-doctoral program seminars. Successful academic achievement in the coursework of the PhD program is to be confirmed by the teachers.
- (4) The PhD students organise their individual curricula according to the curriculum of the appropriate PhD commission and in consultation with their supervisors. The curriculum consists of approximately one-half required (interdisciplinary and subject-specific) courses and one-half electives.

§ 6 Supervision

- (1) For each PhD student the PhD commission responsible appoints a three-person supervisory 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. Providing support in planning publishing activities.
 5. Within eight weeks after nomination of the members of the supervisory group a first briefing with the student should be conducted. A protocol of this meeting must be recorded.
 6. The supervisory group conducts a briefing with the PhD student at least once a year until submission of the thesis. A protocol of this briefing must be recorded.
- (2) The supervisory group appointed by the PhD commission for the programs “Veterinary Research and Animal Biology” and “Animal and Zoonotic Infections” comprises the main supervisor at the TiHo, a full-time member of the faculty at the TiHo, as well as a professionally competent scientist from outside the university. The members of the supervisory groups must be qualified as a professor (e.g. habilitation) or show proof of comparable scientific qualification. The supervisory group has to make sure that from the very beginning the PhD student abides by the rules of good scientific practice. The candidate must confirm in writing that he or she received such instruction.
The form concerning animal protection (“*Dissertationsanzeige – Tierschutz*”) must be submitted to the PhD office of the HGNI at the beginning of the project. This form must be resubmitted if changes are made in the project design.
- (3) The supervisory group appointed by the PhD commission for the program “Systems Neuroscience” comprises the main 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 supervisory group must come from another organisation than the main supervisor (external supervisor). The members of the supervisory group must be qualified as a professor (e.g. habilitation) or show proof of comparable scientific qualification.
The supervisory group must make sure that from the very beginning the PhD student abides by the rules of good scientific practice. The PhD student and the main supervisor must confirm this in writing.
- (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 TiHo, the PhD commission is authorised to

establish requirements in individual cases. These requirements must not be less demanding than those of these PhD regulations.

(5) In the case of interdisciplinary research projects, the PhD commission can in agreement with the first supervisor appoint a second supervisor, whose speciality must be closely related to the theme of the project. The commission confirms the intended supervisor for the project and appoints the supervisory group.

(6) Within the framework of the research project a well-defined theme regarding content should be worked on with appropriate methods, so that there is a realistic chance of successful accrual of scientific knowledge and the results can be published in international journals with a referee system.

(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 the successful completion of the course of study not be foreseeable due to the student's performance thus far, the supervisory group can suggest the PhD course be ended prematurely.

(9) If premature discontinuance of a project is impending for these or other reasons, there must be a mutual meeting between the PhD student, the supervisory group and a member of the PhD commission. This PhD commission then decides the further course of action and if necessary exmatriculation of the student.

(10) Following a successfully completed course of study, the supervision ends when the PhD student has passed the PhD examination. The defence must take place no more than five years after the PhD course was commenced. In well-founded cases the PhD commission may grant an extension.

§ 7 Scientific Colloquia

Once a year, the HGNI invites the PhD students to participate in a colloquium open to all university members. The students either give a lecture or make a poster presentation about the current state of research and the progress they have made. The form and content of the presentations are to be graded.

Section Five: Examination

§ 8 Prerequisites for Admission to the PhD Examination, Withdrawal, and Re-admission

- (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 publication from the thesis submitted to 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 English on the research project completed during the PhD study course submitted in both printed and electronic form. The thesis covers the research project conducted as part of the PhD course and contains an introduction, methods, results, discussion, a summary (in both German and English) and a list of references.
 4. Alternatively, the student may submit a cumulative thesis in 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 published. Information must be provided explaining the student's particular contribution to the scientific design, execution, evaluation, and scientific writing. These publications must be thematically related; when submitted as a cumulative thesis, they must be supplemented with a comprehensive description of the research topic (introduction), a full discussion of the results, a comprehensive summary (in German and

English), and a literature list for these sections. A separate materials and methods section must be included if the descriptions in the individual chapters are not sufficiently detailed.

5. The form and content of the title page and page 2 of the thesis must correspond to Attachment 1.
6. An affidavit from the PhD student confirming that he or she wrote the thesis independently, what kind of assistance was provided upon request, and the fact that the work has not been previously submitted for evaluation for a test or doctoral examination or for any similar purpose. If the thesis was written at an institution external to the TiHo, the supervisor at the institution in question must submit a statement confirming he or she approves the submission of the thesis at the TiHo.

(2) A separate statement has to be submitted if the candidate seeks a Dr. rer. nat. (degree in the natural sciences; See § 13 (3)). In this case the current rules for a doctoral program at the TiHo in the natural sciences apply for the evaluation of the work.

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

(4) The procedure leading to a doctorate is opened with submission of these documents and the thesis. Registration for the PhD exam can be cancelled by submission of a written statement to the president as long as the external evaluation has not been submitted. Unsuccessful termination of a PhD at any university must be reported to German universities. A new PhD application can be made one time only no earlier than one year after a cancellation.

§ 9 Evaluation of the Written Work

(1) Final grading of the thesis on the basis of the evaluations is the responsibility of the PhD commission. The supervisory group prepares a joint evaluation. Additionally, the PhD commission requests an external evaluation. All reports must be written independently of each other and should be submitted with signatures in printed or electronic form within four weeks. Both reports must contain an evaluation of the thesis graded as follows:

"very good" (= 1),
"good" (= 2),
"sufficient" (= 3),
"not sufficient" (= 4).

Theses worthy of distinction can be given the grade "very good with distinction" (*summa cum laude*). If the evaluations are not unanimous, 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 serious deficiencies, then the criteria for admission to the final examination will not be met; in this case exmatriculation of the PhD student takes place.

(3) Evaluation of the written thesis for obtaining the Dr. rer. nat. degree is made in accordance with the doctoral regulations of the TiHo for natural sciences.

§ 10 Defence

(1) Invitation to the defence (*Disputation*) follows submission of the evaluations and an overall grade of at least "sufficient".

(2) The defence takes place as a lecture open to all members of the University given by the PhD student on the research project in English. The lecture must last at least 30 minutes and is followed by a public discussion of at least 15 minutes. The main supervisor and at least one additional member of the supervisory group must be present on-site. The PhD commission can also include the external evaluator in the supervisory group for evaluation of the written work. All members of the supervisory group are entitled to vote on the grading.

(3) In exceptional cases (pandemics and the like) candidates and evaluators participating by electronic media (video conference) will be considered present.

(4) If the student fails the PhD examination, it can be repeated once at a date scheduled by the supervisory 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.

(5) The results of the examination are to be recorded and reported to the PhD commission.

§ 11 Overall Evaluation

(1) After the defence the PhD commission evaluates the overall quality of the thesis (§ 9) and defence (§ 10) to arrive at an overall assessment. The overall evaluation comprises two-thirds of the evaluation of the written thesis and one-third of the evaluation of the defence.

The following overall evaluation will be given with average grade of

- 1.0: "very good with distinction (*summa cum laude*)", if the conditions of section (2) 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*)".

(2) The PhD commission can award to excellent theses the distinction "*summa cum laude*" if (I) the thesis has been published or accepted for publication completely or in part by the date of submission in at least one article in an internationally recognised peer-reviewed scientific journal with the student as first author; (II) the overall assessment is a grade of 1.0; and (III) the distinction *summa cum laude* is given in the written evaluations as well as for the defence.

(3) The overall evaluation of students seeking the Dr. rer. nat. degree according to § 13 (3) will be made in accordance with the regulations of the TiHo for the corresponding doctoral degree in natural sciences.

§ 12 Duplication of the PhD Thesis

The student is obliged to make the thesis accessible to the scientific community. The written work (thesis) must be submitted to the library of the TiHo in digital form and in printed copies made from the electronic file before the academic degree is granted. The PhD commission may require editorial amendments before the thesis is copied. Publication by the library is to take place directly after the graduation ceremony (§ 13). Publication of the PhD thesis can be delayed by request to the respective PhD commission for a maximum of six months.

§ 13 Awarding of the Academic Degree of Doctor of Philosophy (PhD)

(1) When the student has successfully passed the final PhD examination and submitted the copies to the library, the academic degree Doctor of Philosophy (PhD) will be awarded by the TiHo. A certificate with the date of the defence as specified in Appendices 1 and 2 will be issued in German and English. Only after this document with the affirmation of the doctoral oath has been issued is the candidate entitled to use the academic title of PhD.

(2) According to the doctoral regulations of the TiHo for the *Doctor medicinae veterinariae* degree, it is possible after the degree has been awarded for a candidate eligible to use the title of PhD from the TiHo to apply for a *doctor of veterinary medicine* (Dr. med. vet.) instead. This requires fulfilment of the prerequisites defined in the doctoral regulations of the TiHo for the Dr. med. vet. A decision against the PhD degree is irrevocable.

(3) Alternatively, graduates who prior to the PhD program have completed a natural science course of study may upon application made no later than submission of the thesis be awarded the title of Dr. rer. nat. in accordance with the doctoral regulations of the TiHo for natural sciences. A certificate will be issued corresponding to these PhD regulations. The award of the Dr. rer. nat. also requires that one of the evaluators in the doctoral procedure be a natural scientist.

§ 14 Annulment of the Doctoral Degree

The Senate of the TiHo 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.

§ 15 Revocation of the Academic Degree of PhD

The Senate of the TiHo decides if the academic degree is to be revoked.

§ 16 Interim Regulations

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

Hannover, 29 July 2020

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

Attachment 1: Specimen title page and page 2 according to § 8, Section 1 no. 5

Title page for PhD degree:

University of Veterinary Medicine Hannover

Optional: [Institute or Clinic]

Optional: [ZSN]

[Title]

THESIS

Submitted in partial fulfilment of the requirements for the degree

**DOCTOR OF PHILOSOPHY
(PhD)**

awarded by the University of Veterinary Medicine Hannover

by

[given name surname]

born in [place of birth]

Hannover, Germany [year]

Title page for the Dr. rer. nat. degree:

University of Veterinary Medicine Hannover

Optional: [institute, clinic]

Optional: [ZSN]

[Title]

THESIS

Submitted in partial fulfilment of the requirements for the degree

Doctor of Natural Sciences

**Doctor rerum naturalium
(Dr. rer. nat.)**

awarded by the University of Veterinary Medicine Hannover

by

[given name] [surname]

born in [place of birth]

Hannover, Germany [year]

Attachment 1: Specimen for page 2

Supervisor: Prof. Dr. xxx
Supervisory Group: Prof. Dr. xxx
Prof. Dr. xxx
PD Dr. xxx

1st Evaluation: Prof. Dr. xxx (institution)
Prof. Dr. xxx (institution)
PD Dr. xxx (institution)
2nd Evaluation: ¹⁾ Prof. Dr. xxx (institution)

Date of final exam: ²⁾ [dd/mm/yyyy]

Parts of the thesis have been previously published in: ³⁾
Sponsorship: ³⁾

- ¹⁾ The name of the 2nd, external evaluator is left open until after the final exam has been passed and only then inserted for printing.
- ²⁾ The date is left open and inserted only after the final exam has been passed.
- ³⁾ If applicable. This information may also be indicated on page 3.

Attachment 2: Specimen doctoral certificate for the PhD according to § 13

– English version –

[TiHo logo]

The University of Veterinary Medicine Hannover awards

Mr/Ms

born [dd Month yyyy]

in [town, country]

the degree of

Doctor of Philosophy (PhD)

in the discipline (as stated in § 8, Section 3).

He/she has submitted a PhD thesis entitled

and successfully passed the public defence as proof of his/her scientific qualifications

with the overall grade of

[1 – 3]

[very good/with distinction (summa...) ... sufficient (rite)].

Hannover, [dd/mm/yyyy, date of defence]

[Seal]

The President

Specimen statement according to § 8, Section 1, no. 6:

(A DIN A4 copy of this statement is to be bound in the thesis as the next-to-last page. The German personally handwritten and signed original is to be submitted with the registration for the PhD examination.)

Affidavit

(This affidavit is to be signed personally)

I herewith affirm that I am the sole author of the thesis titled [complete title], which was written according to the principles of good scientific practice. The following persons provided assistance at my request:

I did not make use of any paid dissertation services or other consultants. Nor did anyone receive unpaid services from me for work related to the contents of the submitted thesis.

The thesis was completed at the following institutions:

This thesis has not been previously submitted for evaluation for admission to an examination, doctoral graduation, or any such purpose.

(If the thesis was written at external institution, this affidavit must be accompanied by a statement by the candidate's supervisor that he or she approves of submission of the work as a PhD thesis at the University of Veterinary Medicine Hannover.)

I herewith declare that I have been informed about the significance of this affidavit and have been made aware of the provisions of § 156 of the German criminal code (StGB).

Date, signature