In its meeting on 4 March 2010 the Senate of the University of Veterinary Medicine Hannover agreed upon extensive amendments to the doctoral regulations for conferring the degree of Doctor rerum naturalium. Hereby the regulations are published anew.

Doctoral Regulations
of the University of Veterinary Medicine Hannover
for conferring the degree of Doctor rerum naturalium

§ 1
General

(1) Due to the following regulations the University of Veterinary Medicine Hannover confers the doctoral degree in natural sciences (Doctor rerum naturalium, abbreviated and used in the following thus: Dr. rer. nat.) for scientific achievements in the research fields covered by the University.

(2) The doctoral degree serves as proof of the ability of independent in-depth scientific work. Such proof is provided by the presentation of a scientific work (doctoral thesis) and an oral examination.

(3) The candidates have to enrol as doctorate students at the University of Veterinary Medicine Hannover and during the entire duration of their doctoral studies have to attain the achievements named in these regulations.

§ 2
Admission requirements

(1) Requirements for admission to the Dr. rer. nat. programme are:

a) A university degree in natural sciences, which was completed with the passing of a diploma examination, master’s examination, final examination approved by the state or an equivalent final examination at a scientific university or

b) a proper course of studies qualifying for teaching at grammar schools or at vocational schools of at least eight semesters in at least two scientific school subjects (e.g. biology, chemistry, food science, mathematics), which was completed by passing the First State Examination for Education for teaching at grammar schools or at vocational schools in the jurisdiction of the Basic Law of the Federal Republic of Germany or

c) a comparable course of study successfully completed abroad, insofar as the Doctoral Commission recognises this as an equivalent substitute by means of a positive list or a decision in single cases. If there is any doubt in the case of a foreign applicant that the applicant’s university degree is equivalent to the
master’s degree of the University of Veterinary Medicine Hannover, the Doctoral Commission for Admission to a Doctorate may decide on further requirements.

(2) Particularly qualified graduates of a study course at a polytechnical school lasting at least eight semesters may be admitted on their substantiated request to the President. The Doctoral Commission may demand proof of knowledge or specify further study requirements.

§ 3

Doctoral commission

(1) The Senate appoints a Doctoral Commission for carrying out the doctoral procedures. This is responsible for all doctoral procedures concerning regulations of admission, enrolment and the doctoral regulations.

(2) The Commission consists of the Vice President for Research, at least three further members of the group of university professors, a postdoctoral research assistant as well as, in an advisory voting capacity, a doctoral student. At least half of the Commission should consist of natural scientists.

(3) The Commission is headed as a rule by the Vice President for Research or by an elected Chairperson.

§ 4

Doctoral project notification

(1) The doctoral student presents the President his/her planned doctoral project at the beginning of the project in the form of Attachment 1. Thereby, the theme, the objective, the planned experiments as well as the anticipated new scientific findings should be presented and the members of the Supervision Group have to be named in accordance with § 5. In the case of doctoral projects, which are completed outside of the University of Veterinary Medicine Hannover, the cooperative nature of the study has to be presented (§ 5 section 2). Moreover,

- a curriculum vitae,

- officially certified copies of certificates, in the case of foreign certificates accompanied by a certified German translation of the relevant university degrees listed in § 2,

- a notification to the Animal Welfare Officer

- confirmation of instruction in the rules of good scientific practice

- two proposals for appointing the external examiner in accordance with § 11 section 1

must be attached.

(2) The members of the Supervision Group must confirm the registration by signature and thereby declare that they will supervise the scientific project and jointly assess the dissertation.
(3) The dissertation notification shall be passed on by the President to the Doctoral Commission, which approves this, if necessary subject to conditions, and appoints the Supervision Group as well as the external examiner for assessing the dissertation.

(4) After approval of the notification by the Doctoral Commission the doctoral student enrolls at the University of Veterinary Medicine.

§ 5

Supervision

(1) The Doctoral Committee elects for each doctoral student a Supervision Group of at least two persons. This consists of the specialist supervisor at the University of Veterinary Medicine Hannover as well as a further certified specialist. At least one member of the Supervision Group should be a natural scientist. Members of the Supervision Group can be a university professor or habilitated members of the faculty of the University of Veterinary Medicine Hannover. Supernumerary professors are entitled to supervise dissertations, if they have habilitated or hold qualifications equivalent to a habilitation. In order to evaluate the qualifications equivalent to a habilitation an informal application to the President has to be submitted, which includes the entire list of publication achievements since gaining the doctorate. The decision regarding the successful evaluation is made by the Senate based on the recommendation of the permanent members of the Habilitation Commission.

(2) Should a dissertation be completed outside of the University of Veterinary Medicine Hannover (external dissertation), in addition an external supervisor has to be chosen who has habilitated or holds a comparable qualification to the habilitation. In this case the supervisor has to present the scientific career of the external supervisor in connection with the notification of the endeavour. In case of doubt the Doctoral Commission requests a curriculum vitae from the external supervisor. External dissertations are only permitted if they exist within the scope of a cooperative collaboration between a university institution and the external institution. In this case the joint supervision has to be documented when handing in the doctoral application, e.g. by a publication manuscript (to be handed in at least on publication), in which the supervisor of the university is named as author or co-author.

(3) Should various scientific institutes be involved in the doctoral project, a joint supervision by a respective member of the institutions can occur, if the members of the institutions fulfil the aforementioned requirements.

(4) The Supervision Group has the following tasks:

- Supervision and individual expert advice for the doctoral students during the entire duration of the doctoral studies. This includes the approval of the teaching programme for the doctoral students in accordance with attachment 6.
- Checking as well as evaluation of the doctoral thesis and the doctoral thesis defence.
- Lending support in planning publication activities as well as reflection on further career development

- The Supervision Group meets up at least once a year with the doctoral student for an advisory session regarding the progress of the doctoral thesis.

(5) The Supervision Group is obliged to issue the evaluation of the doctoral thesis in accordance with § 4 section 2 and § 11 in time for the submission of the application for admission to the Dr. rer. nat. examination. Should the supervisory support for the doctoral student be ended before submission of the doctoral application, the President has to be promptly informed about this decision, stating the reasons for this.

§ 6

**Attainment and attestation of interdisciplinary qualifications**

Until completion of the doctoral thesis evidence of the attainment of key qualifications and seminar credits within the scope of at least 150 hours in accordance with attachment 6 of the doctoral regulations should be presented. The individual teaching programme should be approved by the Supervision Group.

§ 7

**Application for admission to the Dr. rer. nat. examination**

(1) The application for admission to the Dr. rer. nat. examination is made in writing to the President of the University of Veterinary Medicine Hannover. The dates for the Dr. rer. nat. examinations are set by the Senate. The President decides on extra dates in agreement with the Doctoral Commission.

(2) To be enclosed in the application are:

1. A doctoral thesis in German or English in two bound copies (DIN A4) as well as a copy for each member of the Supervision Group

2. The report of the Supervision Group,

3. A further, external report,

4. Proof of the qualifications named under § 6,

5. An up-to-date curriculum vitae supplemented by a list of any scientific publications (attachment 2),

6. A passport photograph;

7. A written declaration of the applicant that he or she wrote the doctoral thesis on his or her own, which assistance of third parties was used thereby and that the doctoral thesis was not already submitted for an examination or doctoral examination or for a similar purpose (attachment 3).
Should the doctoral thesis have been completed at an institution outside of the University of Veterinary Medicine Hannover, a declaration by the Head of the institution concerned, in which the approval to submit the doctoral thesis to the University of Veterinary Medicine Hannover has been given, has to be enclosed.

§ 8

Opening of the Dr. rer. nat. examination procedure; Admission to the Dr. rer. nat. examination

(1) After receipt of the application for admission to the Dr. rer. nat. examination the Doctoral Commission opens the Dr. rer. nat. examination procedure if the requirements, in particular those named in § 2 of these regulations, are met.

(2) The doctoral student as well as the members of the Supervision Group must be informed about the opening or rejection of the opening of the Dr. rer. nat. examination procedure in writing.

§ 9

Doctoral thesis

(1) The doctoral thesis must be an independent contribution of the doctoral student to research and contain new findings. It is not allowed to have been submitted for or used for an examination either at home or abroad or for attaining a higher educational degree.

(2) Should the doctoral student have published results of the doctoral thesis, this must be noted on a separate page.

(3) At least two manuscripts already published or accepted for publication which are thematically related (cumulative doctoral thesis) can be recognised as a doctoral thesis if the publication(s) is/are in (an) internationally recognised scientific journal(s) with a peer review process and as a rule not older than two years. The doctoral student has to be the sole or first author. In the case of joint publications with other authors the doctoral student has to state which part of the publications was independently contributed by him or her. The cumulative doctoral thesis must include an introduction, a detailed summary of all results and a general discussion.

§ 10

Formal requirements for the doctoral thesis

(1) The title page of the doctoral thesis has to be arranged according to attachment 4a and 4b. The cover has to contain the title of the doctoral thesis and its author.

(2) The doctoral thesis must contain a list of contents, a reference list as well as a clearly structured summary in German and English, each headed with the name of the doctoral student and the title of the doctoral thesis. This applies accordingly also for a doctoral thesis which should be recognised as such in accordance with § 9 section 3. The leaflet from the library must be complied with.
Evaluation of the doctoral thesis

(1) The evaluation of the doctoral thesis is carried out by the Supervision Group. The Doctoral Commission additionally gets a further external expert opinion on the doctoral thesis after the doctoral thesis has been handed in. This evaluation has to be done by a university professor or by a habilitated scientist who was not involved in the supervision of the doctoral thesis and who does not belong to one of the scientific institutions involved. In the case of doctoral theses from big scientific institutions (more than 2 departments) the last-mentioned condition is not applicable. The second opinion has, as a rule, to be handed in within four weeks after the doctoral thesis has been sent to the external expert.

The doctoral thesis and the expert assessments are available for at least 10 days after submission of the doctoral thesis for inspection by professors of the University of Veterinary Medicine Hannover, who are given the opportunity to submit written comments to the Doctoral Commission within the above-mentioned deadline.

(2) The report of the Supervision Group and the external report must be given in written form and independently from one another. In each report a final evaluation according to the following scale of grades has to be carried out:

“very good” (= 1)
“good” (= 2)
“satisfactory” (= 3)
“unsatisfactory” (= 4)

In the case of prize-worthy doctoral theses the grade “summa cum laude” can be given.

(3) Should the assessment by the Supervision Group find deficiencies in the doctoral thesis, the Supervision Group may suggest in a preliminary assessment the removal of these shortcomings be removed. The Doctoral Commission decides on and sets a deadline of up to two years for the shortcomings to be removed. Afterwards, the final evaluation takes place in accordance with section 1. Should the named deadline in section 2 not be kept, as a rule the doctorate procedures have to be ended in accordance with § 13 section 3.

(4) The doctoral thesis shall be deemed accepted if it has been evaluated in both reports with at least “satisfactory” and a possible objection by a professor has been dispelled. Should the grade “unsatisfactory” be awarded in both reports, then the doctoral thesis is rejected.

(5) Should the doctoral thesis be evaluated in one report with “unsatisfactory” or objections against the acceptance of the doctoral thesis could not be dispelled, then the Doctorate Commission can ask for the opinion of a third examiner. Thereby, the third examiner should on request be allowed to inspect the current reports. He or she proposes the acceptance or rejection of the doctoral thesis and the Doctoral Commission makes the final decision by taking into consideration all three reports.
(6) In case the doctoral thesis is rejected, the doctorate procedure must be ended. The President informs the applicant in writing of the rejection of the doctoral thesis, the justification for the rejection, the ending of the doctorate procedure as well as information on the candidate’s statutory rights. The Senate makes a decision regarding an objection after consulting the Doctoral Commission.

(7) In the case of unsuccessful completion of the doctorate procedure the doctoral thesis is not allowed to be submitted as such to any other higher educational institute or university.

§ 12

Doctoral Thesis Defence

(1) If the doctoral thesis is accepted, an oral examination takes place in the form of a public doctoral thesis defence at the university in front of the members of the Supervision Group, the external expert and a further member of the teaching staff. § 11 section 1 clause 1 of this regulation applies accordingly. The examiners and the examination date are decided upon by the President acting on a proposal from the Doctoral Commission and the doctoral student is informed in writing at least 7 days before the examination date.

(2) The doctoral thesis defence consists of a 30-minute long presentation by the doctoral student on the research project, followed by a public discussion on the project of at least 15 minutes in length. The presentation can be held in English in coordination with the examiners.

(3) The doctoral thesis defence must be evaluated by the examiners with a consensual grade in accordance with the scale of grades in § 11 section 2. Should the doctoral student fail to attend the doctoral thesis defence without good reason, the examination shall be deemed failed.

(4) After the successful passing of the doctoral thesis defence the accepted title page of the doctoral thesis is attached.

(5) If the doctoral thesis was evaluated with “unsatisfactory” or it is regarded as not passed, it may be repeated once. In the case of renewed insufficient performance or absence without good reason the doctoral procedure must be ended. § 11 section 6 applies accordingly.

§ 13

Overall Assessment

(1) After the doctoral thesis defence the Doctoral Commission determines the overall evaluation on the basis of the evaluation of the dissertation (§ 11) and the doctoral thesis defence (§ 12). In order to come to an overall assessment the two evaluations of the doctoral thesis and the grade for the doctoral thesis defence count for a third each. The grade is with an average of 1.0: very good (summa cum laude) in case the prerequisites of section 2 are met,

from 1.0 to 1.4: very good (magna cum laude),
from 1.5 to 2.4: good (cum laude),

more than 2.4: satisfactory (rite).

(2) The grade “summa cum laude (with distinction)” can only be awarded if the overall assessment is a grade 1.0, a recommendation of the supervisors and examiners has been given as well as two manuscripts have been published or accepted by the date of the doctoral thesis defence in accordance with § 9 section 3.

(3) The candidate is informed by the President about the result of the Dr. rer. nat examination procedure, in the case of rejection with justification and information on the candidate’s statutory rights.

§ 14
Publication

(1) The doctoral students are obliged to make the doctoral thesis available to the scientific public.

(2) In addition, they deliver, at the latest one week before the day of the doctorate, a digital copy as well as five printed copies of the doctoral thesis. File format and data medium comply with the guidelines of the university library. The publication of the doctoral thesis in a journal or as a monograph by a commercial publisher is permitted. The requirements of § 10 must be fulfilled.

§ 15
Doctoral Certificates and Awarding of the Doctorate

(1) Two doctoral certificates (with and without grades) according to the given samples in attachments 5a and 5b are personally signed by the President. They are dated on the day of the oral examination.

(2) In one doctoral certificate (attachment 5b) the final grade of the examination has to be given.

(3) The President draws up the certificates as soon as all the doctoral attainments have been fulfilled and the dissertation in digital form as well as the copies of it have been delivered. Only after the doctoral certificate has been handed over has the graduate the right to bear the title of Doctor.
§ 16
Withdrawal of the Doctoral Application

An application of a doctoral candidate may be withdrawn by a written explanation to the President, as long as the second evaluation has not yet been carried out.

§ 17
Resumption of the Doctoral Procedure

(1) If a doctoral procedure is unsuccessfully finished, the German universities have to be informed about this.

(2) A new doctoral procedure can only be initiated once, but not within the first six months after the first doctoral procedure was unsuccessfully finished. This also applies if the first doctoral procedure was unsuccessfully finished at another German university.

§ 18
Annulment of the Graduation

Should important requirements for the enrolment for the doctorate have wrongly been assumed to exist or the applicant has committed fraud during a doctoral examination, the Senate can declare the graduation for invalid.

§ 19
Denial of a Doctorate

The doctoral degree may be denied by the Senate in particularly serious cases.

§ 20
Golden Doctoral Graduation Anniversary

On the occasion of the 50th anniversary of the graduation day the doctoral certificate can be renewed by decision of the Senate of the University of Veterinary Medicine Hannover. It bears the date on which it was handed over.

§ 21
Honorary Doctorate

(1) The University of Veterinary Medicine Hannover can award the degree and the honour of a “Doctor rerum naturalium honoris causa” (Dr. rer. nat. h.c.). For this purpose, a decision with a majority vote of at least two thirds of the members of the group of university professors of the Senate is essential.

(2) The honorary graduation takes place with the handing over of a certificate signed by the President in which a Laudatory speech decided upon by the Senate is included.

(3) The Lower Saxony Ministry for Science and Culture and the German Universities are notified of the honorary graduation.
(4) The provisions of §§19 and 20 shall apply.

§ 22

Coming into Force

The doctoral regulations decided upon by the Senate shall be made public. They come into force on the day after being published in the “Verkündungsblatt” of the University of Veterinary Medicine Hannover.

Hannover, 07 June 2010

Dr. Gerhard Greif
President
Attachment 1 (in accordance with § 4 of the Dr. rer. nat. - Doctoral Regulations):
First name: ..............................................

Address: ..............................................................................................................................

Theme of the planned dissertation: ............

(Tip: the description of the work should not be longer than 2 DIN A 4 pages)
Objective:......

Planned investigations: ...

Expected new findings: ...

Methodology of the work: ...

**Supervision Group (§ 4):**

Supervisor (internal): .................................................................
Name of the Higher Educational Institute

Further expert scientist in an associated field: .................
Name of the Higher Educational Institute

In the event of an external dissertation:

In the case of external dissertations an external supervisor has to be named.

**Supervisor (external):**

............................................................................................................................
Name Institute (external)

An explanation regarding the cooperative nature of the dissertation is essential:

**Two proposals for appointing a possible second reviewer (§ 11 section 1):**

1\textsuperscript{st} proposal: .................................................................
Name Institute (external)

2\textsuperscript{nd} proposal: .................................................................
Name Institute (external)

............................................................................................................................

Candidate`s signature, date
The following attachments are required:

- Notification to the Animal Welfare Officer
- Confirmation of instruction in the regulations regarding good scientific practice

Declaration of the Members of the Supervision Group (§ 4 section 2):

With our signatures we confirm the registration of the above-mentioned doctoral thesis and declare that we will supervise the research project and jointly review the doctoral thesis.

Additionally in the case of external doctoral theses:
A description of the scientific career of the external supervisor: .................................................................
........................................................................................................................................................................
........................................................................................................................................................................
........................................................................................................................................................................

........................................................................................................................................................................

Signatures of the members of the Supervision Group, date
Attachment 2 (in accordance with § 7 section 2 sentence 4 of the Dr. rer. nat. - Doctoral Regulations)

Curriculum vitae

1. All first, second and last names of the applicant.
2. Place (in the case of foreign towns indicate the state as well), day, month and year of birth
3. Nationality
4. Schools attended (with details of time and place, in the case of foreign towns indicating the state as well)
5. When and where the higher education entrance qualification was obtained
6. When and where and with which overall grade the degrees relevant for admission were completed
7. Previous professional work

A list of any scientific publications quoted in full should be enclosed.
The accuracy of the given information must be confirmed by signature.
Attachment 3 (in accordance with § 7 section 2 sentence 7 of the Dr. rer. nat. - Doctoral Regulations)

The declaration should be written by hand and signed.

Declaration

Hereby I declare that I wrote the dissertation (details of exact title) on my own. The following support of a third party was sought when completing the doctoral thesis:

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

I have taken no help against payment from consultancy services (doctoral adviser or other persons). None has received services against payment indirectly or directly for work which is in any way connected with the contents of the submitted dissertation. I completed the dissertation at the following institutions:

........................................................................................................................................
........................................................................................................................................

The doctoral thesis was not submitted previously for an examination or doctorate or for a similar purpose for assessment. (If the doctoral thesis was completed at an external institution, a declaration of the head of the corresponding institution also has to be enclosed, stating that he/she agrees to the work being submitted in form of a dissertation to the University of Veterinary Medicine Hannover.) I declare to the best of my knowledge that all details are complete and correspond to the truth.

........................................................................................................................................

Date, own signature
Attachment 4b (in accordance with § 10 section 1 - back page of 4a)

Scientific supervision: ..............................................................
..............................................................
..............................................................

1st supervisor: ..............................................................

2nd supervisor: ..............................................................

Day of the oral examination: ..............................................................
The University of Veterinary Medicine Hannover

awards

Ms/Mr first name last name

Place of birth

the degree of

Doctor of Natural Sciences

- Doctor rerum naturalium -

(Dr. rer. nat.)

After he/she has proved in the orderly doctorate procedure with the dissertation

Title title Title title Title title Title title Title title Title title Title title

Title title Title title Title title Title title Title title Title title

as well as with the disputat his/her ability to conduct in-depth independent scientific work

Hannover, 00.00.0000

President of the University of Veterinary Medicine Hannover
The University of Veterinary Medicine Hannover awards

Ms/Mr first name last name
Place of birth

the degree of
Doctor of Natural Sciences
- Doctor rerum naturalium -
(Dr. rer. nat.)

After he/she has proved in the orderly doctorate procedure with the dissertation

Title title Title title Title title Title title Title title Title title Title title
Title title Title title Title title Title title

as well as with the disputation his/her ability to conduct in-depth independent scientific work and thereby has received the overall grade

1... 3
Very good (summa ...) ... satisfactory (rite).

Hannover, 00.00.0000

President of the University of Veterinary Medicine Hannover
### Attachment 6 (in accordance with § 6 of the Dr. rer. nat. - Doctoral Regulations)

<table>
<thead>
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<th>Theme</th>
<th>Scope (max.)</th>
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<tr>
<td><strong>(1) Key qualifications</strong></td>
<td></td>
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<tr>
<td>English language course</td>
<td>30 hours</td>
</tr>
<tr>
<td>Exception: stays in English-speaking countries of at least three months, native speaker</td>
<td></td>
</tr>
<tr>
<td>Biostatistics</td>
<td>24 hours</td>
</tr>
<tr>
<td>Rhetoric/presentation techniques/use of media</td>
<td>24 hours</td>
</tr>
<tr>
<td>Laboratory animal science (only in the case of doctoral studies with an animal experimental part): FELASA B and C certifications</td>
<td>80 hours (40 hours each)</td>
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<td>Max. 158 hours, without FELASA 78 hours</td>
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<tr>
<td><strong>(2) Doctorate seminars (compulsory)</strong></td>
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</tr>
<tr>
<td>Participation at one seminar per month</td>
<td>2 hours monthly = 12 seminars per year = 72 hours in three years</td>
</tr>
<tr>
<td>Giving at least two project-related seminars in the English language</td>
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<tr>
<td>TOTAL</td>
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<tr>
<td><strong>TOTAL AMOUNT</strong></td>
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