Course of Study

Begin with winter term

1. Supervision group

The group consists of the main supervisor, one member of the teaching staff (Mitglied des Lehrkörpers) and one external supervisor. The members of the supervision group are confirmed by the PhD commission and will be communicated by the HGNI. If the degree “Dr. rer. nat.” instead of “PhD” is desired the PhD commission has to be informed, because it is required that in the doctoral procedure one of the examiners must have the degree Dr. rer. nat.

1.1. Personal briefings

Eight weeks after nomination of the members of the supervision group the student has to arrange a first meeting. Thereafter, official meetings with the supervision group must take place once a year to discuss the project and to further substantiate the course of study and career plans (which electives to select, which conferences to go to, etc.). The arrangement of the official meetings is in the student’s responsibility. The protocol forms (in the study book) must be signed by the supervision group and the originals sent to the HGNI.

1.2. Good Scientific Practice (GSP)

In the beginning of the thesis work and laboratory activities the supervisor introduces the student to the Good Scientific Practice (Gute wissenschaftliche Praxis). Scientific work is based on principles observed in all countries and in all scientific disciplines. First among these is honesty towards oneself and others. This is also the ethical norm and foundation of the various rules that apply in the different disciplines defining scientific professionalism, or good scientific practice. One of the core tasks of scientific teaching and academic self-regulation is to instruct students in these principles and to safeguard their validity and application in practice. Good scientific practice is also a prerequisite for highly productive research that is recognized in international competition. Violation of these principles is scientific misconduct. In case of suspicion of scientific misconduct, it is the responsibility of the University to clarify the facts in an orderly way, and if necessary to impose the sanctions stipulated by law.

Guidelines are available on the TiHo homepage: http://www.tiho-hannover.de/studium-lehre/promotion-und-phd-programme/phd-veterinary-research-and-animal-biology/good-scientific-practice/

Please send the originally signed protocol to the HGNI.
2. Course of study

During the PhD program of six semesters students have to do one half compulsory classes according to the course of study, the other half are electives. If not stated otherwise, a presence of 75% is required for acceptance.

2.1. Compulsory course work

The purpose of the obligatory course work is to familiarize participants with important aspects of scientific working and to acquire basic knowledge in different areas of veterinary research and animal biology.

**Block Seminar Veterinary Research** (28 h)

The seminar covers important topics of veterinary research and animal biology and takes place once a year. In the first year one topic selected by the faculty is assigned to each student to report on during the lecture series. At the beginning of the 90 min lecture, the lecturer gives a 45 min introductory lecture on a main topic. A student will then give a 30 min presentation on a subtopic followed by 15 min discussion with the auditorium.

PhD students are **obliged to attend all topics and to do one seminar. Missed topics have to be caught up on!**

- Bioethics and fundamentals of scientific reliability (8 h)
- Animal welfare regulations (2 h)
- Avoiding plagiarism (1–3 h)
- Repetition biometry (12 h)
- Introduction to basic molecular biology (16 h)
- Presentations at the institute (6 x 1 h)

In laboratory meetings the students learn how to present and to discuss scientific results. There should be one presentation per semester.

- Attendance of a public defence (1 per year) (3 x 1 h)
- Scientific congresses (3 with active participation) (80 h)

Participation in national and international meetings and congresses offers excellent opportunities to learn from leading scientists. At three congresses the active participation, i.e. with presentation of a poster or talk, is required. The events are credited with 8 h for a whole day and 4 h for half day.

**Poster presentation** (8 h + 1 h presentation)

After the first year, the PhD student has to prepare a **poster** at the annual HGNI colloquium (**Graduate School Day**) showing the progress of the project. Poster and its short presentation are evaluated by members of the faculty. The participation in the colloquium is credited with 8 h as scientific congress.

**Oral presentation** (8 h + 1 h presentation)

After the second year students have to present their work in a **talk** at the **Graduate School Day**. There will be a feedback by the evaluators. The participation in the colloquium is credited with 8 h as scientific congress.
2.2. Electives

Within the elective program students can develop their own special interests and deepen their specialized knowledge. The elective classes include lectures, seminars and laboratory courses, which generally cover more specialized topics than the obligatory classes. Furthermore, students are given the opportunity to train management, teamwork and presentation skills as well as competence regarding writing and publishing papers and statistics.

Each PhD-student has to participate in three elective courses other than those offered by her/his own department. External courses (not HGNI) can be recognized by a special request to the PhD commission and with signed approval of the main supervisor.

3. Final Examination

(for details please see “Guidelines for Submission of a Thesis”)

For approval to the final exam the course work has to be completed, one submitted publication as first author in recognised scientific journals with peer review are required and a written thesis has to be prepared. The thesis can be submitted either in English or in German.

This can be a monograph or in chapter form (similar to cumulative thesis, where two publications with the student as first author must be accepted). The supervision group and an external referee write reports on the thesis and send them to the PhD commission. Finally, an oral presentation of the thesis with public defence (“Disputation”) follows. After the defence, the PhD commission decides about the overall result.

4. Finalization and promotion ceremony

After passing the final examination the last student’s duty is the submission of depositary copies and a pdf version of the thesis to the library of the TiHo. (Details are described in “Guidelines for Submission of a Thesis”. The library will send a receipt to the Graduate School.

Finally, the PhD student receives the certificate and the respective academic degree is awarded during a promotion ceremony (Feierliche Promotion) by the president of the TiHo together with all candidates of the semester (December or June). Thereafter it is allowed to use the title.