

Information sheet on D-BIOL doctoral studies

1. The D-BIOL doctoral studies panel

This panel meets on a regular basis, usually on a 6 to 8 weeks basis. It reports on its activities and decisions to the departmental conference twice per semester.

The panel's duties include:

- approval of **dissertations carried out externally**
- approval of **co-referees** (i.e. all referees who are not professors appointed by ETH; definitive confirmation by the departmental conference). Co-referees should be named as soon as they are known, and at least **one year before the end of the doctorate**.
- approval of candidates **who do not require additional qualifying exams**
- proposal and approval of **additional qualifying exams** required for certain doctoral-studies applicants (in cooperation with the dissertation supervisors)
- approval of doctoral studies **research proposals**
- evaluation of the **dissertations proposed for distinction awards**

The D-BIOL Doctoral Studies Panel currently comprises the following members:

- Prof. Julia Vorholt, director of studies (Institute of Microbiology)
- Prof. Ulrike Kutay (Institute of Biochemistry)
- Prof. Kaspar Locher (Institute of Molecular Biology and Biophysics)
- Prof. Wolf-Dietrich Hardt (Institute of Microbiology)
- Prof. Anton Wutz (Institute of Molecular Health Sciences)

2. Research proposals

Submission deadline: 12 months after provisional admission

Each doctoral student has to submit his/her research proposal to the D-BIOL doctoral studies panel within twelve months after the provisional admission. The research proposal document should **not be longer than five pages (title page plus four pages content, consisting of approx. 2000 words)** and have the following format:

Title page:

- **working title** of the proposed dissertation
- **name and contact information** of the doctoral student
- **institute**, at which the dissertation should be carried out
- name of the **PhD program** (if applicable)
- **names and signatures of the following people:**
 - **doctoral student**
 - **ALL the members of the doctoral thesis committee (ETH-external dissertations require also the signature of the ETH-external supervisor).**
- **proposed dates for the beginning and planned end** of the dissertation

Content (approx. 2000 words):

- an **introduction** (suitable for 'general biologists')
- descriptions of the **questions/hypotheses/goals** that the dissertation should address
- the experimental **approach/strategy**
- **results obtained** in the period until submission of the proposal
- a schematic time **schedule** (what should be achieved when and by which means)
- **a list of relevant references** (cited in the text)

For doctoral students who started their dissertation after 1 November 2013 the following must be indicated in addition:

- **expected publications**
- **teaching responsibilities**

Important: When submitting your research proposal to the D-BIOL (address see last page) always include the completed and signed form "**Bestätigung für die definitive Zulassung zum Doktorat**" (confirmation of definitive admission to doctoral studies). This form can be downloaded from the web at the following URL:

https://www.ethz.ch/content/dam/ethz/associates/students/doktorat/files/research_plan.pdf

3. Doctoral thesis committees

Due: together with the research proposal

Role and tasks

The thesis committee gives its consent to the research plan, supervises the progress of the project and evaluates the doctoral thesis. In case of serious differences of opinion, the candidate or any member of the committee can ask the director of studies for mediation.

Composition of the thesis committee

Every doctoral student of the D-BIOL is required to have a doctoral thesis committee. It consists of three to four persons:

- the official thesis supervisor (D-BIOL professor)
- the immediate supervisor (if applicable)
- two additional professors or senior scientists
 - as a rule at least one from the D-BIOL
 - one who is independent from the institute of the official supervisor

Thesis committee meetings

Regular meetings will be held at least

1. at the time of the submission of the final research plan
2. approx. two years after the start of the project
3. at the time of the intended conclusion of the project

For the meetings 2 and 3 the doctoral students prepare a short written progress report. Meetings will also be held at the request of either the official or immediate supervisor or the candidate.

4. Doctoral program and credit units

Effective: entire doctoral study period

The ETH doctoral studies aim is to also enlarge a student's knowledge beyond the stated research field. Credit units are awarded for the formal courses offered. Guidelines for obtaining credit units are included in the "Ordinance on Doctoral Studies ETH Zürich" as well as in the department specific "Detailed regulations".

The ETH ordinance on doctoral studies determines the following (extract):

- The doctoral candidates have the right and obligation to continue their professional development.
- The objectives of doctoral studies are to enable doctoral candidates :
 - to acquire knowledge and skills in the field of the doctoral thesis, in cognate disciplines and in interdisciplinary areas;
 - to integrate themselves into the scientific community.
- One credit corresponds to a workload of between 25 and 30 hours. Credits are awarded only if the candidate has performed the work required on his/her own.
- At least twelve credits must be earned.
- The doctoral candidate must obtain at least one third of the required credits outside his/her research field.
- Doctoral studies may be taken within an individually-tailored or regulated doctoral programme.

The following detailed guidelines apply to doctoral studies undertaken with the ETH Department of Biology:

I. General rules

1. The department requires a doctoral studies supervisor, **together with the doctoral candidate, to set up the plan for a doctoral study program** which adequately encompasses both the topic of the thesis and the interests of the candidate.
2. For doctoral studies undertaken **externally at non-ETH institutions**, a study program should be set up that is **qualitatively equivalent** to that at ETH and suited to the individual circumstances.
3. The restrictions on the doctoral studies choice possibilities for a candidate with a foreign mother tongue should be taken suitably into account.
4. It is the supervisor's duty to ensure appropriate documentation of the courses taken are kept to oversee the record of credit units attained, and to provide written confirmation of the fulfilment of the requirements to the

department's director of studies prior to the candidate's registration for the doctoral examination.

5. A minimum of 12 credit points has to be presented. One credit point is equal to an effort of 25 – 30 hours of work.
6. Credit points obtained in doctoral programs are fully accepted.

II. Special recommendations

1. Lectures

A **minimum of 2 credit units** should be obtained from formal courses taken in **the 3rd year of the BSc curriculum and/or in the MSc curriculum** and/or in doctoral programs (active participation required).

- Biology lectures

In principle, all of the **biology courses offered in the 3rd year of the BSc curriculum and in the MSc curriculum at ETH or at the University of Zurich are eligible for the acquisition of credit units**. Courses not included are those having a subject content equivalent to pre-graduate courses already taken by the candidate.

- Courses offered by other departments at the ETH

Courses offered by other ETH departments, especially in "Social Sciences and Humanities" (D-GESS), are eligible for the acquisition of credit units.

2. Language courses

A maximum of **four credit units** can be acquired from completed **language courses**, so long as the candidate has not previously been examined in similar language courses at secondary-school level.

3. Activity as a member of a commission or a representative of the doctoral students in the D-BIOL department conference

One credit unit per semester may be gained through active participation in one or more **ETHZ committees or commissions**. Representation by a doctoral student as a delegate for other doctoral students in the **D-BIOL department conference** is worth **0.5 credit units per semester**. A **maximum of 2 credit units** may be gathered in this manner.

4. Active participation in ETH-external congress meetings (poster and/or oral presentation)

One poster and/or one oral presentation of research work at an ETH-external conference is in each case worth **one credit unit** (a maximum of 2

credit units). The credit unit(s) must be confirmed by the chairperson of the event.

5. Participation in workshops

An **active participation in a one-week workshop** or in a one-week continued education course is worth **2 credit units**. A **total of up to 4 credit units** may be gained in this manner.

6. Participation in institute seminars

An **active participation in institute seminars** is worth a maximum of **0.5 credit units per year**. It is the supervisor's duty to confirm the claimed participation.

7. Admission examinations

(The following only applies to doctoral students enrolled before November 2013) Doctoral students having to pass doctoral studies admission examinations may claim up to a **maximum of 4 credit units** originating from those examinations. One subject is worth **2 credit units**.

Applies only to doctoral students enrolled before 1 November 2013.

III. Exceptions

If application of the recommendations outlined in paragraph II of this chapter is judged by the supervisor as likely to cause a candidate particular hardship, decisions concerning the allowance of exceptions to the regulations may be taken by the biology department's director of studies after consultation with the doctoral candidate's supervisor.

5. Registration of co-referees

Effective: 1 year before the estimated end of the dissertation

Co-referees who are not professors appointed by ETH must be registered with the biology department's doctoral studies panel **no later than 1 year before the estimated end of a doctoral study**. They may also be registered at the outset, if they are known. The appropriate registration document is to be used (see below).

<http://www.biol.ethz.ch/content/dam/ethz/special-interest/biol/departement/ApprovalCoreferrees.pdf>

6. Doctoral examination

Effective: towards the end of the project

Confirmation of credit units

The submission of a dissertation at the doctoral studies administration office (at the latest **12 workdays** before the exam takes place) must be accompanied by **documentary confirmation of awarded credit units by the D-BIOL** (signature on the registration form of the person in charge at the D-BIOL study secretariate). In order to get this signature the following documents are required:

- the doctoral examination **registration form**
- the **proofs of efforts**
- a **short written explanation from the dissertation supervisor** expressing that in his/her opinion the requirements concerning the awarded credit units were fulfilled according to the **doctoral studies regulations** and the **detailed guidelines of the D-BIOL**

It is recommended to take care of this confirmation from the study secretariate early enough, so that any delay during the examination registration procedure may be avoided.

Organization of the doctoral examination

The **examination committee** comprises the **referee, co-referee(s) and a chairperson** (one of the full or associate professors of the D-BIOL, arranged by the department).

Fixing a date

The PhD student is requested to **pick one of the time slots from the list of doctoral examinations** (see <http://www.biol.ethz.ch/en/news-and-events/doctoral-examinations.html>) suitable for the referee and all co-referees. Please forward **date, time and room number (to be reserved by the doctoral student at ETH Höggerberg, Zentrum or the Irchel Campus)** to C. Fischer (carmen.fischer@biol.ethz.ch) as soon as the date has been fixed so it will appear “reserved” on the list mentioned above.

The oral examination

The oral examination starts with a public presentation by the candidate on the most important results that have been obtained during her/his PhD (**maximum duration: 20 minutes**). Questions from the public after the presentation are allowed.

The second part of the oral examination (minimum duration: 40 minutes), from which the **public is excluded**, consists of a detailed discussion between the candidate and the

examiners on specific aspects of the thesis and the implications of the results in a broader scientific context. The candidate may illustrate answers to the examiner's questions with figures from the presentation. **Additional figures prepared by the candidate are not allowed for answering questions.**

The result will be communicated to the candidate subsequent to the examination. If the examiners request changes in the thesis, a date will be fixed until when the final version of the thesis must be presented to the examiners.

Procedures after the examination

After the final version has been accepted by the examiners it will be confirmed by the next Departementskonferenz. After having passed the conference the next steps will be communicated by the rectorate. No further action is required until then.

7. Website with information relevant for D-BIOL doctoral students:

<http://www.biol.ethz.ch/en/doctoral-studies.html>

8. Contact:

Carmen Fischer-Romero
HIT F41.2
ETH Hönggerberg
8093 Zürich

Tel.: 044 632 37 03
Fax: 044 632 14 52
e-mail: carmen.fischer@biol.ethz.ch