Département de Biologie des Organismes

Memo of the doctoral research training and Ph.D.

August 2025

Ph.D. Commission: S. Aron (Chair), O. Hardy (Secretary)

The Ph.D. regulations, the rules for enrolling and re-enrolling in the Ph.D. program are available at: https://sciences.ulb.be/intrasciences/espace-doctorant/useful-information-for-phd-students

The aim of the present document is not to replace or summarize these documents. It emphasizes some important points that should not be forgotten and also includes rules specific to the Doctoral Commission of the DBO, approved by the DBO Board on 7/12/2023, as well as an indicative list of activities and credits that can be validated for the doctoral research training.

It came into force on the date of the DBO Board voting (5/12/2024).

1. Conditions of access to the Ph.D. program

The enrollment into the PhD and doctoral research training (if not yet validated) is mandatory every academic year. The process is described on the aforementioned website.

Special points of attention

1.1. First enrollment

Composition of the supervisory committee Additional provisions in the Faculty of Sciences:

The supervisory committee is made up of the supervisor, the possible co-supervisor and at least two other members of the academic staff of a university*, <u>one of whose members belongs, if possible, to another research laboratory</u> whose research themes are distinct from those of the PhD candidate. At least two members must belong to the same faculty as the PhD candidate. The supervisory committee tries to include at least one member of each gender.

Provision specific to the DBO. As much as possible, the Chair of the supervisory committee does not belong to the research laboratory of the PhD student.

*. Scientists from the Federal Scientific Institutions (e.g., Natural History Museum, Botanical Garden) are not considered as academic staff if they do not have a lecturer position at a university.

Specific rules might apply for theses in joint supervision.

1.2. Candidates to a F.R.S.-FNRS fellowship or a FRIA fellowship with a Master degree awarded outside the French-speaking Community of Belgium

Holders of a Master degree awarded outside the French-speaking Community of Belgium are eligible to FNRS and FRIA Ph.D. grants. They are required to provide to the FNRS/FRIA a registration document or a certificate that enables the admission to the doctoral program, issued by the ULB.

Therefore, it is highly recommended to introduce the application to the Ph.D. program at least 15 days before the closing of the call for the F.R.S. FNRS or FRIA fellowships.

1.3. Re-enrollment to the Ph.D. and doctoral research training

If the thesis is not completed after four years – or six years if the doctoral candidate is a full-time teaching assistant – re-enrollment is only authorized with the duly justified <u>approval of the supervisory committee</u> and the explicit agreement of the Faculty Doctoral Commission.

2. Role of the supervisory committee (SC)

The SC must be established for the first enrollment. The composition of the SC may be modified during the course of the thesis with the agreement of the Doctoral Commission.

2.1. Missions

The main mission of the SC is to guide and advise the students in their research. All the members are able and willing to help them effectively concerning their supervision and relation with their supervisors. If necessary, and with the agreement of both the doctoral candidate and his/her supervisor, the SC may, at any moment, suggest that the Faculty Doctoral Commission appoints a co-supervisor or a new supervisor. The reasons for this change must be duly motivated.

At the request of the doctoral student or if he deems it useful, the Chair of the SC meets with him/her behind closed doors.

In the event of a conflict between the candidate and the supervisor, these shall immediately inform the President of the Doctoral Commission. If mediation fails, the Dean of the Faculty should be informed and will act as second mediator.

2.2. FRIA and FNRS 2nd Grant renewal applications

Applicants to a 2nd Grant (3rd and 4th years) are given access to the electronic form by the FRIA/FNRS on <u>e-space</u>.

The decision relating to the renewal of thesis scholarships financed by the FNRS/FRIA is taken by the FRIA/FNRS Board of Directors on the basis of the file and the report of the Intermediate Evaluation transmitted by the SC. In other words, it is up to the doctoral student and his/her supervisor to organize the SC meeting in due time and to the SC to ensure the Intermediate Evaluation and to send the detailed report within the required deadlines.

3. Doctoral research training

3.1. Conditions and annual evaluation

The doctoral research training is a program worth 60 credits and is certified by a "Certificat de formation à la recherche".

The program of the Doctoral research training is structured around 3 activities:

- a. <u>Scientific formation</u>: advanced courses (organized by a graduate school corresponding to the research field 3rd university cycle), attendance to workshops, congresses, conferences (without presenting a communication), study trips abroad (summer schools), etc.
- b. <u>Scientific communication</u>: scientific articles, research projects, technical English courses, oral communications or posters in conferences, congresses, dissemination and popularization activities, etc.

c. Possibly, an educational supervision activity

An indicative list of activities and credits that can be validated appears at the end of this document.

- The Ph.D. candidate must diversify his/her skills in his Doctoral Research training as well as in his scientific communication. Only one activity of 60 credits is inadequate.
- The Ph.D. candidate must at least have one scientific communication (oral or poster) as first author in an international symposium or equivalent to have his/her Doctoral research training validated
- The annual report on doctoral research training must be included in each re-enrollment, respecting the three subdivisions mentioned above, using the form provided by the Faculty. Only activities from the past academic year should be indicated. All activities will be presented when validation of doctoral training is requested.

3.2. Validation of the Doctoral research training

It is up to the SC to ensure that the list of activities carried out by the doctoral student corresponds to 60 ECTS, and to validate the doctoral training. This validation is ratified by the Doctoral Commission.

The form « *Transmis de Résultat de la Formation Doctorale »*, completed by the SC and <u>in MS Word format</u>, must be annexed to the Annual Report of Doctoral Training form, for signature by the President and the Secretary of the Doctoral Commission.

3.3. Intermediate evaluation

The Intermediate Evaluation must take place at the latest at the end of the second year of thesis <u>enrollment</u> (third year for teaching assistants and part-time researchers; fourth year for doctoral students who are not funded). At the DBO, it consists of a <u>written and oral</u> presentation of the progress of research work, comparable to the mid-term activity reports for FNRS/FRIA grants. It is valued at 20 ECTS for the doctoral research training. At the end of the evaluation, the Doctoral Commission decides - on the basis of the motivated opinion of the SC - whether the doctoral student can continue his/her doctoral training and his/her thesis, or not. In the latter case, the supervisor is required not to sign the scholarship renewal application.

The intermediate evaluation must be successfully presented before the FNRS/FRIA renewal grant is submitted.

For the renewal of FRIA/FNRS mandates, the SC completes the form provided by the FNRS and sends it to the "Cellule Recherche" for signature by the Rectorate, taking into account the various deadlines. The Doctoral Commission does not take charge of this document

4. Ph.D. submission, jury composition and deadlines

The procedures governing the PhD submission are described at the following address: https://sciences.ulb.be/intrasciences/espace-doctorant/end-of-thesis-procedure

4.1. Rules specific to the DBO

- The Ph.D. candidate will be the first author of at least one scientific publication accepted or published in an international journal with peer review (in the case of a "data paper", the SC will decide on its acceptance).
- The chapters of the thesis not yet published will be presented as a manuscript in preparation (with a title, author(s), abstract, introduction, materials and methods, results, discussion, references, figures/tables).
- The thesis may be written in English or in French or in both languages but each chapter will be written only in one language (English or French).

4.2. Composition of the thesis jury

The thesis jury is composed of at least 5 members.

- •3 members at least must be members of the ULB academic staff (the supervisor and two other members of the Academic staff of the ULB, only one if the co-supervisor is a member this staff).
- ◆2 members at least must be external at the University. External members of the jury may not include co-supervisors.
- ◆ The thesis jury must include members of different genders, and the proportion of the majority gender should not exceed 2/3 of the members. If the latter requirement cannot be met, a justification of the attempts made must be forwarded to the corresponding doctoral commission and for information to the gender commission of the Faculty (Additional provision in the Faculty of Sciences)
- If the thesis is supervised by a supervisor and a co-supervisor, both are members of the jury exofficio with a deliberative vote.
- Only one member of the jury (except for the supervisor and co-supervisor) may be co-author of a single article included in the thesis, whether published, in press, accepted or in preparation.
 In this case, the Chair of the SC has to motivate in writing the choice of including this jury member when the jury composition is submitted to the Doctoral Commission.
 - The composition of the jury for a thesis prepared under joint supervision is fixed by the thesis joint supervision agreement. When establishing this agreement, the ULB supervisor will try to respect as well as possible the ULB and DBO rules. The ULB supervisor will also make sure that the composition of the jury will be submitted to the ULB and partner university Doctoral Commissions simultaneously.
 - —In the case of a joint supervision, it may happen that supervision is carried out by two supervisors and two co-supervisors. The co-supervisors being *ex officio* members of the jury, the supervisors and co-supervisors might constitute the majority in the jury. In this case, the number of jury members will be increased so that non-(co)supervisor members consitute the majority.

Practicalities in the DBO

The Chair of the CS and the supervisor make sure that:

- the thesis is completed before its submission at the faculty
- all rules are respected
- the submitted jury is relevant
- At the latest at the moment of the submission of the thesis to the Faculty secretary, the supervisor communicates to the Chair of the Doctoral Commission the title of the thesis, the proposed jury composition (mentioning a possible co-author of a publication besides the supervisor and co-supervisor), the references of the accepted or published articles as well as a proposition of dates for the private and public presentations and, if relevant, a copy of the joint supervision agreement. The Chair of the Doctoral Commission asks the President of the DBO to put the informations about the submitted thesis and jury composition on the agenda of the next board meeting of the DBO.

4.3. Private and public presentations

- Rules and deadlines are fixed by the PhD regulations of the University.

Indicative list of activities and credits that can be validated for the doctoral research training

Reminder

- In bold = Defined by the Faculty
- The diversification of activities is compulsory for the acquisition of the Doctoral research training
- The SC validates the activities and the ECTS acquired for the Doctoral researd training for each student

Update voted by the DBO Council on 5/12/2024

The new features are highlighted in yellow. They take effect for activities starting from 6/12/2024

I. Scientific formation (maximum 30 ECTS)

0,2 ECTS/hour, 1 ECTS/day, maximum 5 ECTS/formation

- Formations in scientific communication
- Language courses
- General research formations
- Formations in management
- Educational formations and techno-educational formations
- Career development trainings
- Master courses, not included in the 300 ECTS valued for the enrollment
- Internal workshops of the research unit or the Department (ISS)
- Summer schools
- Ph.D. Day
- Workshops of the Doctoral school
- Attendance to symposiums, conferences, congresses without oral or poster presentations (max 2ECTS/meeting)
- Scientific stay in a research laboratory external to ULB, in Belgium or abroad (except cosupervisor and/or joint supervisor laboratories) <u>1 ECTS/day, maximum 10 ECTS</u> (field trips are not eligible)

II. Scientific communication

- II.1. Scientific meetings (oral communication or poster) maximum 20 ECTS
 - International meetings: 4 ECTS/communication or poster as 1st or co-1st author, with effective presentation (provide the meeting name and dates) (not cumulative with participation as an auditor!)
 - Seminar internal to the research unit (oral presentation or poster): 1 ECTS
 - Ph.D. Day, study day (oral presentation or poster): 1 ETCS

II.2. Written production: maximum 20 ECTS

- Scientific article published in a journal or book **with** peer review: first or co-first author: 10 ECTS, co-author: 2 ECTS ("preprints" -e.g., bioRxiv.org- which has not been peer reviewed are not accepted)

- Scientific article published in a journal **without** peer review: first or co-first author: 2 ECTS, co-author: 1 ECTS

- Popular article: 2 ECTS

- Report: 1 ECTS

III. Educational supervision

0,4 ECTS/hour, 2 ECTS/day, maximum 10 ECTS/activity and 20 ECTS over the whole Doctoral research training

- Methodological supervision of a Master thesis: 10 ECTS
- Praticals and exercices supervision: <u>include the course title and the number of hours worked in front</u> of the students
- Science exhibition organized by the University
- Supervision of trainees
- Active participation to student fair

IV. Intermediate evaluation: 20 ECTS

V. Others

Knowledge transfer (5 to 10 ECTS)

- Patent application

Professional experience related to the subject of the research thesis (5 to 10 ECTS) This concerns principally people completing their thesis later in their career (e.g., high school teacher) for which a part of their professional experience can be validated.