## OPERATIONAL REGULATION OF THE DOCTORAL SCHOOL OF BIOLOGY AT EÖTVÖS LORÁND UNIVERSITY

## 1.§ General Instructions

- The Doctoral School of Biology at Eötvös Loránd University (hereafter referred to DSB) operates within the Institute of Biology of Faculty of Sciences, representing a functional education unit that is approved by the Hungarian Accreditation Council (HAC) and performs organized and individual training programs in biological sciences for students in order to obtain a doctoral (PhD) degree.
- 2. This regulation has been prepared according to the relevant operative laws and other regulations implemented in HAC Organizational Regulation 4th Appendix, which stands on the establishment and operation of doctoral schools, as well as the rules of ELTE University Doctoral Regulation (hereafter UDR) and Doctoral Regulations of the Faculty of Sciences (herafter FDR). It primarily contains those rules that, in reference to certain issues, are in line with the mentioned rulings but requires more detailed regulations. In cases not mentioned in this regulation, the relevant directions of UDR and FDR must be applied.
- 3. The regulation has been ratified by the University Doctoral Council (hereafter UDC), based on the advice of the Doctoral Council of Natural Sciences (hereafter FDC).

## 2.§ Head of the Doctoral School

- 1. Instructions related to the leader of the Doctoral School are included in the (1)-(4) paragraphs of UDR 16.§.
- 2. In case of absence of the head of the Doctoral School, which was previously announced to the chair of FDC, the Council of the Doctoral School elects a permanent vice-chair endowed by a signature law from the program leaders.

## 3.§ The Council of the Biology Doctoral School

- 1. The Council of the Doctoral School (hereafter Council) helps the work of the head of the Doctoral School and regularly convene sessions. Its members consist of the Head of the Doctoral School (ex officio), who is also the Chair of the Council, and the heads of the individual doctoral programs. Further members of the Council are elected by the core members of the Doctoral School from among their members by a secret ballot.
- 2. In case of elected members, it must be considered that programs covering more than one sub-disciplines of biology (Departments) should be represented by one-one representative of

each participating Department and academic research group, as well as at least one core member from an external institute should also be elected as member.

- 3. The Council may elect a secretary, who helps the Head of the Council in performing administrative and organizational tasks.
- 4. One member of the Council is a PhD student who is elected by doctoral students participating in the doctoral training.
- 5. The members of the Council are appointed by and relieved by the FDC.
- 6. The tasks and working rules of the Council are specified by the points *a*-*k* of the FDR 3.§ 3 paragraph. The Doctoral School entitles the further tasks of the Council as follows:
  - a. Determines the requirements and evaluation criteria of the entrance exam, and informs the student (applicants) about these points at an appropriate time and mode.
  - b. Determines for the Doctoral Candidates the qualitative and quantitative criteria of the independent publication activity that they have to fulfill before preparing the doctoral dissertation.
  - c. Determines, and time-to-time re-evaluates the list of scientific journals, in which publications are accepted for fulfilling the publication requirement for a PhD degree. The list is available on the Faculty's public homepage.

#### 4.§

## The Programs and the Head of the Programs of the Doctoral School

- 1. The Doctoral School consist of and operated in the frame of the following 10 programs:
  - 1. Ecology, Conservation Biology and Systematics
  - 2. Ethology
  - 3. Immunology
  - 4. Experimental Plant Biology
  - 5. Classical and Molecular Genetics
  - 6. Molecular Cell- and Neurobiology
  - 7. Neurobiology and Human Biology
  - 8. Structural Biochemistry
  - 9. Zootaxonomy, Animal Ecology, Hydrobiology
  - 10. Theoretical and Evolutionary Biology
- 2. Upon the advice of the Head of the Doctoral School, the program leaders of are delegated by the FDC. Program heads are responsible for maintaining the standard and quality of the education and research performed in the corresponding program. Program leaders officially are members of the Council.
- 3. The head of the program organizes the annual evaluation report of the doctoral students participating in the particular program.

- 4. The heads of the programs organize and preside of the entrance exams, which is supervised and controlled by the head of DSB.
- 5. The council appoints, by nominated by the program leaders, members of the program councils for three years, at least three research scientist, one of them cannot be employee of ELTE.

## 5.§ Lecturers and Supervisors of the Doctoral School

1. Lecturers/instructors and supervisors of the Doctoral School must possess a PhD degree, and are evaluated by the Council to be capable of providing high standard of teaching and research activities and serving as qualified topic supervisors.

## 6.§ Doctoral training

- 1. UDR 25.-47.§ and FDR 5.-7.§ contain the regulations of doctoral training, including those related to the application, enrolling, student relationship, shifting the subject, interrupting the training period, partial training on abroad and training plan of students.
- 2. Enrolment for an individual training (part time, individual training plan) is decided by the FDC. The FDC also decides on the duration of the doctoral relationship of individual training programs, which must include at least two semesters, considering the advice of the Doctoral School. Student with an individual training program must also obtain 240 credits. The Council of the Doctoral School can also recommend the acknowledgement of professional achievements of students having individual training program with credits. In this way the student can get a release from her/his courses up to 50% of the credit requirements. Granting of the above release is recommended by the Council of the Doctoral School and endorsed by the FDC.
- Obtaining a PhD degree without participating in a doctoral training program (individual doctoral program) offers an exceptional case to acquire a doctoral degree. Candidates are allowed to enter the process by the FDC, upon the recommendation of the Council of the Doctoral School. The Doctoral School examines the circumstances, the teaching and research achievements of the candidate (habitus examination). Considering the fact that receiving a PhD degree without participating in a training course represents an exceptional case, the professional requirements exceed those provided in case of the organized training program. After an individual training program, the requirement to apply for the doctoral degree is publication of minimum five research papers, and in three of those the candidate must be the first author. The head of DSB recommends granting the doctoral degree for the FDC.

The Doctoral School promulgates the following rules by September 1, 2016 in an ascending system:

- 1. The length of the doctoral training is 8 semesters (4 years), during which the PhD student must obtain 240 credits. Credits can be taken by participating on courses (32 credits) and performing a supervised research work (208 credits). Credit cannot be acquired by teaching activity performed in the Biology Doctoral School.
- 2. During the first four semester of the training program the PhD student has to obtain at least 32 credits, in average 2 in each semesters. 1 contact lecture per a week is equal to 2 credits, assuming the student passes the exam. Lecturers evaluate the fulfilment of courses by using a five-degree scale (1-2-3-4-5), and upload the grades into the NEPTUN system.
- 3. 208 credits have to be obtained by performing a supervised research work. Research activity is evaluated by the supervisor, using a 3-grade scale system (excellent sufficient insufficient). The fulfilment of credits is confirmed by the head of the Doctoral School upon the advice of the supervisor. In frame of the supervised research work, PhD students are suggested to obtain 25 credits per a semester during the 1<sup>st</sup> to 4<sup>th</sup> semesters and 54 credits during the 5<sup>th</sup> and 6<sup>th</sup> semesters. A possible distribution of the credits is shown in the table below. The number of credits within the first four semester could be between 4 and 20

semester	1	2	3	4	5	6	7	8	sum of cr.
Educational	8	8	8	8	0	0	0	0	32
Research	25	25	25	25	54	54	0	0	208

- 4. During the first two years of the training program, PhD students have to obtain at least 4 credits per each semester by attending courses to fulfil the requirements for each semester. In special cases (e.g., study trip on abroad) this rule can be suspended by the head of the programs.
- 5. PhD students can obtain course credits by attending other courses offered by other doctoral programs or schools. This action has to be authorized in advance by the program leader.
- 6. PhD students can obtain research and course credits by performing a partial training program in another national or international institute/University. The training plan of this must be approved by the Council, considering the advice of the supervisor and program leader.
- The total number of course credits obtained by attending other programs or schools (partial training) or considering previous activities cannot exceed 30% of the required total course credits.
- 8. In case of a partial training performed on abroad, translation of grades should be achieved according to the ECST (ECST-grade: A, B, C, D, F Hungarian mark: 5, 4, 3, 2, 1).

9. During the first two years of the training program, PhD students have to obtain each semester at least 4 credits from attending courses and 15 research credits. If the doctoral student fails to fulfil the above requirements he/she will be automatically transferred from the self-financed program.

# 8.§ The comprehensive examination

- 1. At the end of the 4<sup>th</sup> semester, PhD students have to take a comprehensive exam, the fulfilment of which serves as a condition to start the second half of the training program. The requirement of the application for the exam is the presence of 32 course credits ad 90 research credits. A part of the preparation for the exam is to prepare a 3-5-page-long report summarizing results and advances achieved during the first two years and providing a research plan for the next period. This document has to be sent to the chair of the exam and the program leader 2 weeks before the exam.
- 2. The complex exam is public and evaluated by a committee. The committee consists of three members having at least a PhD degree, one of which comes from outside the institute where the PhD program is undertaken (ELTE). The chair of the committee is a professor, professor emerita/emeritus or a lecturer/researcher having a DSc degree.
- 3. The complex exam consists of two parts. In the theoretical part the PhD student takes an exam in one main (primary) subject and one secondary subject. The list of main and secondary subjects can be found in the training plan of the Doctoral School. In the second part, the student talks about the research work she/he performed previously and plans for the second half of the project within 20 minutes. The report is followed by a 25 min long discussion.

In the theoretical part, the performance of the student is qualified at each subject individually by the committee, using a two-level evaluation scale (sufficient – insufficient). If one of the subjects is evaluated by insufficient qualification, the student can take a second exam in the same exam period. The mode by which the exam is evaluated is determined by the Doctoral School using the following rules. The committee evaluate separately the theoretical and practical parts of the exam. In case of the theoretical part, the main and secondary subjects are counted at a ratio of 2:1, using a four-level grade (summa cum laude, cum laude, rite, insufficiente). The theoretical part is evaluated by using a three-grade scale.

A minute is made from the complex exam.

The evaluation of the complex exam contributes to the final qualification of the doctoral degree.

1. The university level rules of quality assurance are controlled by the UDR 21. and 22.§. The quality assurance plan of the DSB is attached as an appendix.

# 10.§ Foreign Language Proficiency

1. Referring to FDR 9.§, the Doctoral School mandatorily defines English as a first (primary) foreign language required for pursuing research in the field of biology. The list of other foreign languages is determined by the Council.

## 11.§ Management of the Doctoral School

- 1. The budget, proposed by the head of the Doctoral School is approved by the Council.
- 2. The income of the Doctoral School consist of the sum ("normative") provided by the State and redistributed based on the Faculty' budget, moreover tuition fees provided by self-financing students and other incomes (grants), minus University and faculty overheads.
- 3. Expenses of the Doctoral School dividing incomes among the programs are approved by the Council, considering the proposal of the head of the Doctoral School.
- The head of the Doctoral School can put aside part of the income approved by the Council – to cover unexpected expenses.
- 5. The head of the Doctoral School has the right to control the expenditures. In case of permanent absence of the head this right could be delegated to the vice chair.
- 6. The head of the Doctoral School is responsible for formally managing the budget.
- 7. The Council works out the rules for using and operating shared equipment purchased from the budget of the Doctoral School.

## 12.§

## Administration of the Doctoral School

 Applications for admission must be submitted to the Doctoral Group (DG) of the Faculty during the period advertised in the application call. The DG then prepares a documents required for the NEPTUN system, and forward them to the doctoral schools for organizing the entrance exams and notifying the applicant of the exam dates. DG must also be informed of the place and date of the entrance exam.

- 2. Enrolment and registration for the actual semester, storage of the educational and personal data of registered and suspended students carried out by DG. Any application irrespective of the competency (for reviewing, archiving after a decision, registration) should be submitted or forwarded to DG.
- 3. Doctoral students must pay their fees using bank transfer to their account by the NEPTUN system or paying to a general transfer account requested previously. The DG is responsible to issue an invoice.
- 4. Scholarships for students can be disbursed via the NEPTUN system, for which documents requested by the Academic Regulations of the Students must be forwarded to DG at least 2 weeks prior to due date of the first scholarship in each semester.
- 5. The tasks of the head of the Doctoral School or another person (secretary) appointed by him/her:
  - a. Prepares a record of the Council session and send this document within a week to the chair of the FDC and members of the Council.
  - b. Compiles and makes public the course list of the actual semester in agreement by the program leader.
  - c. Participates in preparing reports, statistics, grant applications, etc.
- 6. The Doctoral School can appoint an assistant for administrative tasks, for helping the head and the secretary.
- 7. The administrator
  - a. Assist the head and secretary in administrative issues of the Doctoral School.
  - b. Register the expenditure of the Doctoral School.

## **Closing remarks**

The present regulation of the Doctoral School was discussed and approved by the Council. The regulation comes into effect on the day when the UDC confirm it based on the recommendation of FDC. This Regulation was approved by the Doctoral Council and confirmed by the University Doctoral Council at the session on October 13, 2016.

## Supplements:

- 1. Subject list for the comprehensive doctoral exams.
- 2. Quality assurance plan.

#### Supplement 1.

Zootaxonomy

#### The list of main and secondary subjects for the comprehensive exam

It can be chosen as a primary or secondary subject

Anatomy **Bioinformatics** Biochemistry Physiology Ethology **Evolutionary biology** Developmental biology Genetics Hydrobiology Human biology Immunology Microbiology Molecular biology Neurobiology Plant physiology Plant taxonomy Plant anatomy Ecology Cell biology It can be chosen as a secondary subject only Methods for studying biology Plant stress Major transitions in evolution **Biophysics** Biogeography Plant control **Biostatistics Evolutionary genetics** Protein science Immunology of infections Gene technology Human ethology Human genetics Neuronal cell and developmental biology Control of immune processes Methods in immunology Cognitive ethology Conservation biology Pathological immune processes Mycology

Microbial biotechnology

Modelling in biology Molecular developmental genetics Molecular tumour biology Paleopathology Psychopharmacology Methods of multivariable data processing Virology Behavioural physiology Behavioural ecology

### Supplement 2

Quality assurance plan

(see in a separate file)