ORGANIZATIONAL AND OPERATIONAL REGULATIONS OF THE DOCTORAL SCHOOL OF BIOLOGY AND SPORTS BIOLOGY OF THE UNIVERSITY OF PÉCS

I. General provisions

1./ The Doctoral School of Biology and Sports Biology of University of Pécs (henceforth referred to as "BDS") conducts doctoral education duly accredited by HAC (Hungarian Accreditation Committee). The programme is aimed at proposing a doctoral (PhD) degree as the highest academic title in the field of biological sciences to be awarded within the course of the curriculum as well as by way of individual preparation.

2./ BDS has the right to:

a./ conduct doctoral education, which includes participation in the admission and examination procedure, as well as the right to carry out educational activities.
b./ jointly exercise authority to introduce doctoral education and to issue a proposal for the initiation of doctoral proceedings.
c./ perform habilitation procedures.

3./ BDS acts, within the course of their activity, in compliance with Appendix Nr. I. of OOR of UP and the Rules of Procedure of the Doctoral and Habilitation Committee of Sciences (DHCS), as well as relevant regulations thereof. All proposals and resolutions are filed with the Doctoral and Habilitation Committee of Sciences.

II. Organization of the Doctoral School of Biology and Sports Biology

The operation of BDI is based on the activities of core members, supervisors and lecturers of the doctoral school. The work of the school is organized and coordinated by the head of the doctoral school and the Council of the Doctoral School of Biology and Sport Biology (CBDS). The research activity of BDS is divided into theme groups according to the relevant subject matter. Theme leaders of the respective groups are internationally renowned experts with a continuous full employment with UP.

1./ The head of the doctoral school is a university professor with an "Academic doctor's degree" employed by the University as a full-time employer.. The head of the doctoral school is nominated by the core members of the doctoral school, and he/she is subsequently approved by way of accreditation through the Senate.

Accountabilities of the head of the doctoral school:

a./ applies for accreditation of the doctoral school,
b./ takes part in the admission procedure and defining the maximum number of admitted students,
c./ takes responsibility for the quality of educational and scientific activity of the doctoral school,
d./ takes responsibility of the internal administrative, budgetary and financial affairs of the doctoral school,
e./ coordinates the work of the Council of the Doctoral School of Biology and Sport Biology (CBDS).
f./ nominates new core members, personally.

g, in agreement with the CBDS, appoint the members of the complex examination committee of the four-year training student

The head of the doctoral school is entitled to appoint colleagues from among lecturers involved in the activities of the school, who shall provide professional support in the aforementioned accountabilities.

2./ Tasks of the theme group leaders as duly assigned to each of the following scientific fields: 1: Genetics; 2: Microbiology; 3: Regulatory biology; 4: Plant biology; 5: Ecology, 6: Sports biology.

a./ proposing the announcement of doctoral themes,
b./ ensuring the availability of proper infrastructure necessary for the educational and research activities of doctoral students,
c./ supervising the activities of supervisors, coordinating and approving the implementation of thematic duties related to the respective theme groups,
d./ filing proposals for the subjects of PhD exam and the complex exam, for the composition of the examination and defense committees as well as for the nomination of pre-opponents and opponents,
e./ attending to the management of the budget of the theme group.

Common costs of the doctoral school have to be jointly borne by the theme groups in equal shares.

3./ It is a major prerequisite for supervisors that they shall, within the course of their scientific and academic performance, comply with the habilitation requirements of BDI, and that their publication activity in the last five years shall – at least – meet the current outcome requirements necessary for obtaining a PhD degree.
Appointments for supervisors are approved by CBDS upon request (see: official application) of the supervisor candidate. The personal scope of supervisors is subject to review by CBDS once in every accreditation term.

Further provisions applicable to supervisors:

a./ submits proposals for the individual training and research scheme of doctoral students; takes charge of quality assurance and implementation,
b./ provides assistance for doctoral students in carrying out their activities, writing scientific publications, elaborating the doctoral dissertation, and supports them when applying for scholarships abroad,
c./ makes a proposal for granting absolutorium,
d./ supervises compliance with the formal requirements set forth in connection with the dissertation and the thesis,
e./ gives an opinion on applications for foreign degree recognition (i.e. nostrification),
f./ takes responsibility for the professional substance of the finished doctoral dissertation.
g/ when a PhD study is already in progress, no personal change of supervisor is possible without the prior written consent of the Council of BDS.
h/ one supervisor is allowed to have a maximum number of four non-doctor PhD students or doctoral candidates at the same time. Non-doctor students are deemed to impede the supervisor’s opportunities for seeking a new field of theme leadership for a period of 5 years, or 2 years in case of fulfilling all the relevant outcome requirements.

III. The Council of the Doctoral School of Biology and Sports Biology (CBDS)

The professional activities of the doctoral school are coordinated by the head of the doctoral school with the involvement of CBDS.

Composition of CBDS
Members entitled to vote:

Chairperson: head of the doctoral school
Deputy Chairperson: deputy head of the doctoral school, who – in the absence of the head of school – might represent BDS in front of DHCFS with equal voting rights.
Core members.
Doctoral representatives (with consultation rights), who are delegated by doctoral students with a state scholarship.
Secretary (with consultation rights, if not a core member), appointed by the Chairperson.

The head of the Institute for Biology is a regular visiting member of CBDS.

The task of CBDS is to elaborate the internal rules and framework requirements of the school in line with the University Doctoral Regulations as well as the Faculty's Rules of Procedure. Its scope of authority includes:

a./ proposing personnel adjustment of the school: engaging and eliminating core members, supervisors, lecturers.
b./ creating and amending the framework regulation of the school,
c./ appointing the Admission Committee,
d./ defining minimum requirements needed for admission,
e./ proposing the admission of PhD students, the initiation of the process for obtaining a PhD degree, or the termination of student status,
f./ setting out relevant publication requirements for doctoral students,
g./ giving the competent bodies notice of decisions and proposals in the specific cases stipulated by the University Doctoral Regulations.
h./ admitting the applications for habilitation.

IV. Modus operandi of the Council of the Doctoral School of Biology and Sports Biology

CBDS shall hold meetings according to the current agenda of duties, however, at least once in every half a year.

The summoning of sessions may be initiated by DHCS, the ***Chairperson*** of the Council of BDS and the members thereof. The session is summoned by the Chairperson. The invitation – including written submittals – shall be served upon the members by no later than one week before the due date of the meeting.

To constitute a quorum, 51% of the members with a right to vote shall be present. Resolutions of the session are normally made by way of an open majority vote. Upon request of any of the members of the Council, voting by secret ballot shall be ordered.

The minutes of the Council meetings are kept. The minutes are compiled by the ***Secretary*** of the Council, and duly certified by the Chairperson. The Chairperson of DHCS and the members of BDS will receive the minutes. Additional administrative duties of the doctoral school are to be performed by the ***Secretary*** as well**.**

V. Keeping records

Keeping records on admitted students is to be administered by the Registrar's Office of the Faculty. Financial records are kept by the Financial and Personnel Department of the Dean's Office and the Economic Directorate-General.

VI. Tuition fee rates and the principles of reduction

Doctoral students with a state scholarship are generally exempt from paying tuition fees while having regard to relevant provisions of the applicable government decree on doctoral education. For students participating in the self-financed training programme the rate of the tuition fee (i.e. training contribution) may be reduced through DHCS as based on the proposal of the theme group leader and by approval of BDS. When making a decision on the relevant rate of reduction due consideration shall be given to the social circumstances of the individual student and the specific professional interests of the training programme.

VII. BDS's admission procedure and minimum requirements

The application for admission shall be submitted by way of an application form.
(see: Attachment Nr. 6.)

The Admission Examination Committee:

The committee consists of 4 members: it is chaired by the Chairperson of BDS or its Deputy, working together with three core members of the doctoral school, including the competent theme group leader. The minutes of the examination are kept. The organization, administration of the admission exam is the task of the Secretary. In addition, the Secretary is in charge of keeping the minutes.

Prerequisites of admission:

University degree in one of the natural sciences (including also teacher training in one natural science), medicine, psychology, pharmaceutics, sports, health and biomedical studies, as well as a university degree related to agricultural studies (at the grade of MSc, MA).
Grade point average (GPA): 3.0 or above.

Calculation of examination points scored:

Basic score (maximum 115 points):

Points of the oral examination	maximum 60
Point value of GPA between 3.5 and 5	maximum 15
3.6 1 point	
3.7 2 points	
3.8 3 points	
3.9 4 points	
4.0 5 points	
4.1 6 points	
4.2 7 points	
4.3 8 points	

4.4	9 points
4.5	10 points
4.6	11 points
4.7	12 points
4.8	13 points
4.9	14 points
5.0	15 points

Point value of scientific student activities	maximum 12 points
participation in OTDK	4 points
II.-III. place in OTDK	8 points
I. place in OTDK	12 points

(OTDK means: Hungarian Scientific Conference for Students)
Point value of advanced or second intermediate language examination maximum 8 points

Points value of publication activities:	maximum 20 points
participation in a domestic conference	1 point
participation in a domestic international conference	2 points
participation in a conference abroad	3 points
study published in a Hungarian-language journal	4-5 points
article published in a domestic English-language journal	6-9 points
study published in an international journal	10-15 points

The evaluation of publications in journals is dependent on the Impact Factor of the journal as well as on the ranking of the candidate's name in the authors' list.

Minimum score required for admission:
- for students participating in the state-funded training programme: 70 points
- for students participating in the self-financed training programme: 60 points

Based on the opinion of the Examination Committees the Council of BDS will take stands on the results of the admission procedure. The Chairperson of the Council files the proposals with DHCS.

VIII. Courses and credits to be completed

THE CREDIT SYSTEM OF THE DOCTORAL SCHOOL OF BIOLOGY SPORTS BIOLOGY

Courses temporarily offered by BDS are contained by Attachment Nr. 1. to this Regulation. Compulsory courses and further credits to be completed by regular course attendance or various activities are comprehensively listed below:

For the three-year training

TOTAL CREDIT POINTS: 180
1 credit = 30 hours
Average number of credits to be obtained per semester: 30 (900 hours)
Minimum number of credits to be obtained per semester: 18

TEACHING (not compulsory)
1 hour per week + the same amount of preparation = 1 credit (30 hours)
For 4 semesters: 4 hours per week altogether ***16 credits***
To be completed in semesters I-IV.
Lectures may be replaced by courses or publications.

COURSES
1 hour per week + the same amount of preparation = 1 credit (30 hours)
Minimum for 4 semesters: 4 hours per week altogether ***18 credits***
To be completed in semesters I-IV (compulsory minimum)

PROCESSING AND PRESENTATION OF SPECIALIZED LITERATURE ***20 credits***
600 hours (taking 40 weeks per year, it makes 80 weeks in 2 years) 7.5 hours / week,
To be completed in semesters I-IV.:

-10 page summary of specialized literature
to be submitted at the beginning of semester III. 10 credits
- delivering a scientific presentation reflecting the outcomes
of research as hitherto obtained at the end of semester IV. 10 credits

LABORATORY PRACTICE
2400 hours (taking 40 weeks per year, it makes 120 weeks in 3 years) 20 hours / week
Continuous performance: maximum 20 credits may be accounted for per semester.
(The Lab may be partly replaced by taking specific courses.) ***80 credits***

LECTURE AT A PROFESSIONAL CONFERENCE
480 hours of preparation for two professional conferences (8-8 credits).
Only first-hand authors will be considered.
(taking a working week of 40 hours it makes 12 weeks) ***16 credits***
(extra credits are admissible)

PUBLICATIONS
960 hours, preparation of default level publications (16-16 credits)
(taking a working week of 40 hours it makes 24 weeks) ***32 credits***
(extra credits are admissible)

TOTAL NUMBER OF CREDITS **180 credits (minimum)**

For the four-year training

TOTAL CREDIT POINTS: 240
1 credit = 30 semester hours
Average number of credits to be obtained per semester: 30 (900 hours)
Minimum number of credits to be obtained per semester: 18

I-IV semester
LECTURES (not compulsory)
1 hour per week + the same amount of preparation = 1 credit (30 hours)
Maximum: for 4 semesters, 4 hours per week altogether ***16 credits***
Lectures may be replaced by courses or publications.

COURSES ***24-50 credits***
1 hour per week + completing personal tasks= 2 credits (60 hours; compulsory minimum 24 credits), To be completed four semesters through.

PROFESSIONAL LITERATURE SUMMARY ***10 credits***
10 page summary of specialized literature
to be submitted at the end of semester II.

PREPARING FOR THE SCIENTIFIC PRESENTATION AND THE PhD EXAM ***10 credits***
to be fulfilled at the end of semester IV.

LABORATORY PRACTICE ***max. 60 credits***
Continuous performance: maximum 15 credits may be accounted for per semester.

TOTAL NUMBER OF CREDITS **120 credit (minimum)**

V-VIII semesters
LECTURE AT A PROFESSIONAL CONFERENCE ***16 credits*** (extra credits are admissible)
480 hours: preparation for two professional conferences (8-8 credits).
Only first author presentations will be considered.

PUBLICATIONS ***32 credits***
(extra credits are admissible)
960 hours, preparation of 2 default level publications

SCIENTIFIC PRESENTATION ***20 credits***
to be fulfilled at the end of semester VI.

LABORATORY PRACTICE ***max. 80 credits***
2400 hours (taking 44 weeks per year, it makes 88 weeks in 2 years) 20 hours / week
Continuous performance: maximum 20 credits may be accounted for per semester.

TOTAL NUMBER OF CREDITS **120 credit (minimum)**

IX. Graduation requirements of BDS concerning language proficiency and publications

1./ Requirements as to foreign language proficiency:

- *PhD students admitted to the BDS after 01st of September 2023: the knowledge of the English language is considered certified based on the PhD courses in English and the complex exam completed during the training.*
- *PhD students admitted to the BDS before 01st of September 2023: they can apply for an exemption from the elementary level complex language examination.*

2./ Outcome requirements of BDS concerning publications:

The candidate shall have made at least two studies with impact factor (IF) published or accepted for publication in the relevant professional field in an international foreign language journal or in an internationally circulated domestic journal. One of the two publications must

be based on first-hand authorship. The scientific value of publications is assessed by way of implication through the so called "Impact Index" defined in the following relation:

$$\text{Impact Index} = \frac{\text{cumulative IF}}{\text{specialist field median IF}},$$

the current value of which is determined by means of the source from Journal Citation Index (JCI). In case of two publications of non-identical specialist field classification the average of the two specialist field median IFs has to be taken. In case a journal is classified into several scientific fields of ISI, the theme leader shall make a statement on which of the scientific fields the particular publication has to be classified into, and which median needs to be taken into account. In case of first-hand co-authors, the criterion for first-hand authorship shall be sufficed by at least two first-hand co-authored IF papers. No exemption from the criterion of first-hand authorship shall be granted by CBDS unless the publication has an extremely high cumulative impact factor. In exceptional cases the publication requirement might also be fulfilled by means of a first-hand authored study, on condition that the paper is published in one of the journals classified among the best 25%, within the relevant professional field, as based on the records of Thomson WOK ISI database. The part of the underlying non-first-hand paper which was the own work of the doctoral candidate has to be clearly indicated. This must be stipulated by the joint statement of the theme leader and the doctoral candidate. A conference abstract or research report will not qualify as a study.

If the graduation process is started beyond 5 years after obtaining absolutorium, then the student is required to fulfil double the outcome publication criteria as amended from time to time. If the graduation process is started beyond 10 years after obtaining absolutorium, the candidate shall fulfil the specific publication requirements applicable to students opting for individual preparation.

Students opting for individual preparation shall meet the following admission criteria:
- experimental area: 20 IF, including a first-hand authored article in the paper's specific field
- non-experimental area: 5 IF, including a first-hand authored article in the paper's specific field

X. Prerequisites and the process of doctoral and habilitation graduation

The prerequisite of the doctoral graduation process is the obtaining of absolutorium certifying the fulfilment of academic requirements. The management of registration course books and the issuance of the absolutorium shall fall within the remits of the Registrar's Office of the Faculty . The head of BDS requests the issuance of the absolutorium from the Registrar's Office of the Faculty in writing. Prerequisite for the commencement of doctoral and habilitation procedures is the payment of the administrative fee (see: Attachment Nr. 7.). Any reduction of the administrative fee may only be admissible in cases duly stipulated by the government decree on doctoral education, whereas no reduction is admissible in case of habilitation.

The course of PhD doctoral graduation for the three-year training students:
The PhD process is divided into two parts: doctoral comprehensive exam and defense of the dissertation.

Doctoral comprehensive exam. The candidate may be admitted to doctoral comprehensive exam after having successfully obtained the absolutorium. The doctoral comprehensive exam

in one major and two minor subjects. At the suggestion of the theme group leader the examination subjects are filed by the Chairperson of BDS with DHCS, which shall then approve them. The list of examination subjects is included in Attachment Nr. 8. Members of the examination committee are the Chairperson, who is a university professor of UP, and the interrogators, who are all experts with an academic title. The board of the committee shall include at least one external professional member who is neither employed by the University nor is a core member of the doctoral school. The theme leader of the candidate may not be a member of the examination board. The minutes of the doctoral comprehensive exam are kept. The examination committee shall make a resolution on the acceptance of the examination by secret ballot, using a score range of 1-5. The doctoral comprehensive exam will be classified as summa cum laude (beyond 85%), cum laude (71-85%), or rite (70-60%). In case of an evaluation below 60% the examination is regarded as unsuccessful.

Defense of the doctoral dissertation. After having obtained the absolutorium, however, within the course of two years from acceptance of the successful doctoral exam the candidate is entitled to enrol on the defense of the doctoral dissertation. The dissertation shall be put up for debate as part of an **in-house defense** prior to its official submission. Pre-opponation is organized by the competent theme leader. For the task of pre-opponation two evaluators shall be appointed, including one independent external professional. The material submitted for in-house defence shall be published one week before the defence. The thesis must include the consenting opinion and the signature of the theme leader and two core members. The participation of at least two core members and five theme leaders at the in-house defence is compulsory, otherwise the in-house defence shall be deemed null and void. In the course of the in-house defence, members of the audience with an academic title are allowed to give an opinion on the thesis by secret ballot, except for the opponents: 1: declare not acceptable; 2: propose major amendments to the final version of the thesis; 3: propose minor amendments to the final version of the thesis; 4: accept without amendments. Should the evaluation of the in-house defence result in a grade below a low pass (2.0), the candidate shall rework the original thesis and introduce the latest version anew – as part of a so called „pre-presentation". After that the candidate may only proceed with the doctoral graduation process with the approval of the Council of BDS.

The dissertation shall be submitted in a form complying with the relevant formal requirements (see: Attachment Nr. 2.) and subsequently defended in front of an examination board (i.e. jury) in an **open debate**. Theses introducing the subject matter, the methods and the recent findings of the dissertation shall be annexed to the invitation in both Hungarian and English. The topic, the date and the venue as well as the online availability of the open debate shall be announced on the notice board and on the website of the Faculty by no later than one week prior to the debate. The scheduling of the defense, at the suggestion of the head of BDS, shall be permitted by the Doctoral and Habilitation Council of Sciences.

The examination board (ie. the jury) consists of 5 members with a right to vote: Chairperson, two evaluators and two additional board members. The Chairperson of the board is the professionally competent university professor of UP. One of the evaluators and at least one more member of the board shall be external professionals. Aspects of evaluation are comprehensively contained by Attachment Nr.3. to this Regulation. The theme leader may not be a member of the board. One substitute member shall be nominated, too.
The jury will decide upon the result of the defense by secret ballot, using a score range of 1-5. The defense will be classified as follows: summa cum laude (beyond 85%), cum laude (71-85%), or rite (70-60%). In case of an evaluation below 60% the defense is regarded as unsuccessful.

The course of PhD doctoral graduation for the four-year training students:
The PhD process is divided into two parts: midterm complex exam (MCE) and defense of the dissertation.

Midterm complex exam: The MCE is composed of two parts: (i) research achievements and (ii) thematic exam. The Examination Committee (EC) consists of three members; at least one of them has no affiliation to University of Pécs (UP). The other two persons maybe academics of UP, one of them is the chairperson of the exam.
The deadline to successfully complete the MCE is the end of the 4th semester of the training (August 31 and January 31 each year). Since one time failure is permitted, lawfully we need to provide a second chance in the same exam period.
The first part of the exam is open to the public, and has to be performed in front of the EC and members of the Council of the Doctoral School. The purpose of this part is to assess research achievements of the past two years. If this part is accepted by 2/3 of the votes (marks 1-5) of the EC, then the second part (thematic exam) will follow. Both the first and the second part of the exam will weight 50% in the final evaluation.
The thematic part can be fulfilled by oral exam from two, preliminarily agreed topics which are prescribed by the council of the doctoral school for each student, considering their special field. The EC will mark these oral presentations. The entire list of topics are made public each year and will be revised each year by the council of the doctoral school. The topics are listed at the Attachment Nr. 9.

Defense of the doctoral dissertation. After having obtained the absolutorium, however, within the course of two years from acceptance of the successful doctoral exam the candidate is entitled to enrol on the defense of the doctoral dissertation. The dissertation shall be put up for debate as part of an **in-house defense** prior to its official submission. Pre-opponation is organized by the competent theme leader. For the task of pre-opponation two evaluators shall be appointed, including one independent external professional. The material submitted for in-house defence shall be published one week before the defence. The thesis must include the consenting opinion and the signature of the theme leader and two core members. The participation of at least two core members and five theme leaders at the in-house defence is compulsory, otherwise the in-house defence shall be deemed null and void. In the course of the in-house defence, members of the audience with an academic title are allowed to give an opinion on the thesis by secret ballot, except for the opponents: 1: declare not acceptable; 2: propose major amendments to the final version of the thesis; 3: propose minor amendments to the final version of the thesis; 4: accept without amendments. Should the evaluation of the in-house defence result in a grade below a low pass (2.0), the candidate shall rework the original thesis and introduce the latest version anew – as part of a so called „pre-presentation". After that the candidate may only proceed with the doctoral graduation process with the approval of the Council of BDS.

The dissertation shall be submitted in a form complying with the relevant formal requirements (see: Attachment Nr. 2.) and subsequently defended in front of an examination board (i.e. jury) in an **open debate**. Theses introducing the subject matter, the methods and the recent findings of the dissertation shall be annexed to the invitation in both Hungarian and English. The topic, the date and the venue as well as the online availability of the open debate shall be announced on the notice board and on the website of the Faculty by no later than one week prior to the debate. The scheduling of the defense, at the suggestion of the head of BDS, shall be permitted by the Doctoral and Habilitation Council of Sciences.

The examination board (ie. the jury) consists of 5 members with a right to vote: Chairperson, two evaluators and two additional board members. The Chairperson of the board is the professionally competent university professor of UP. One of the evaluators and at least one more member of the board shall be external professionals. Aspects of evaluation are comprehensively contained by Attachment Nr.3. to this Regulation. The theme leader may not be a member of the board. One substitute member shall be nominated, too.
The jury will decide upon the result of the defense by secret ballot, using a score range of 1-5. The defense will be classified as follows: summa cum laude (beyond 85%), cum laude (71-85%), or rite (70-60%). In case of an evaluation below 60% the defense is regarded as unsuccessful.

XI. Substantial requirements of the dissertation and the theses, open debate

The **dissertation** must contain a concise overview of the prior knowledge relating to the researched topic, the designation of relevant research targets, the description and documentation of research methods and the recent findings of the research as a proof of the candidate's individual scientific activity, the comparison of new results with the previously known data and principles, a brief summary of the new results, as well as an itemized list of the applied literature in connection with the professional field and a list of own publications related to the topic. The dissertation shall also contain the candidate's full publications' list and a summary in English. Underlying scientific communications and papers need to be annexed to the dissertation as well. The dissertation might also be submitted in English or any other world language, based on the consent of CBDS. Administrative fees in case of non-Hungarian versions may vary.
The length of the short **theses** introducing the subject matter, the methods and the recent findings of the dissertation shall be approximately 10 pages. Pages beyond this number might only include bibliography and the listing of own publications in the relevant field. The theses are to be submitted in Hungarian and English.

Reputed experts of the field need to be invited to the open debate. The Theses are to be attached to the invitation. The invitation shall include the name of the supervisor, the opponents and the board members.

XII. The course of the habilitation procedure

Noted experts of any field of biological sciences with significant activity of higher education and research may file an application for habilitation with BDS. Based on the application and after approval by CBDS the Chairperson of the doctoral school shall appoint two pre-evaluators for the review of the material. The aforementioned persons may not be employees of FS of UP, and in case of an external habilitation they may not be employed by the institution from which the candidate filed his/her application. Based on the unanimous positive opinion of the experts the material shall be compiled in consideration of the particularities of the given professional field and in compliance with the formal requirements defined by DHCS. Following the administrative review through the Secretary the head of BDS will file the material – compiled in the above fashion – with DHCS and make a proposal for the person of the two official evaluators. Minimum requirements regarding the educational and research activity are stipulated by Attachment Nr. 4. of this Regulation. Upon receipt of the opinions of the official evaluators the head of BDI shall take charge of initiating the open section of the procedure in accordance with the habilitation regulations of the University and the Faculty as frequently amended. The outcome of the open procedure shall be submitted for

approval by DHCS and CHU (Council of Habilitatoin of University of Pécs). Habilitation presentations are to be evaluated in a percentual fashion. The prerequisite of carrying forward is scoring at least two-thirds of the points obtainable.

XIII. Principle of distributing the state-funded admission quota

The basic principle of headcount distribution is that each theme group shall, for the sake of continuous operation, be granted at least one student with scholarship in every two years. When distributing the remaining quotas the principle of rotation among theme groups shall be asserted besides the consideration of educational performance of the applicants.

XIV. Economic and financial rules

The revenues of the doctoral school derive from the following three sources:
1. material supply of the state-funded students (i.e. scholarships),
2. tuition fees and training contributions paid by students,
3. administrative fees paid by students.

Expenditures:
1. material expenses of the research by doctoral students,
2. investments, refurbishment of instruments,
3. costs of invited lecturers,
4. administrative fees, (except for cases duly stipulated by the applicable government decree)
5. costs of administration of the doctoral school.

All financial transactions of the Doctoral School shall be carried out with the same specific thematic ID. Apart from that the financial management is decentralized: all theme leaders (with the guidance of theme group leaders) are only allowed to make use of the revenues available on the ground of his/her own student's scholarship, thereby covering the expenses of items 1-3. Theme group leaders must ensure that 5% of the state-funded revenue be allocated to BDS for covering material expenses incurred centrally. Similarly, tuition fees of self-financing students and administrative fees shall fall within the central budget.

The bank account of the Doctoral School is managed by the **head of school**: the head of school is entitled to assign and remit finances. The internal financial records are kept by the person duly approved by the management of the Institute for Biology with the supervision of the **Secretary**.

XV. Closing provisions

This Regulation shall come into effect as of the 1st of September 2016. To doctoral students enrolled before this date the regulation effective on the date of enrolment shall apply.

XVI. Annexis

1. General and special courses offered by BDS,
2. Formal requirements of theses and dissertation, statement on the originality of the paper
3. Guidelines for opponents for the PhD dissertations
4. Minimum requirements of habilitation.
5. Assessment aspects of the application for habilitation.
6. Application form to BDS.
7. Administrative fees.
8. Doctoral exam subjects of the three-year training.
9. Doctoral exam subjects of the four-year training.

Annex 1.

General and special courses offered by Doctoral School of Biology and Sport Biology

All of the courses are calculated as 2 credit points.

Compulsory courses for all of the PhD students of BDS

English terminology in biology	Lecturer: Dr. Róbert Gábriel
Methods in biostatistic	Lecturer: Dr. Zoltán Csabai
The history of biology	Lecturer: Dr. Gyula Hoffmann
Bioinformatics **or** **Molecular background of physical activity**	Lecturer: Dr. Gábor Kemenesi Lecturers: Dr. Márta Wilhelm, Dr. Tamás Atlasz, Dr. Éva Tékus, Dr. Márk Váczi.

The following courses are offered to graduate students at the School of Biology and Sport Biology

Responsible academic	Title
Tamás Atlasz	The effects of the hypoxic/hyperoxic condition in the sensitive tissues
János Csiky, Zoltán Botta-Dukát	Using large databases in phytocoenology
János Csiky	Vegetation of Europe
Ágnes Farkas	Pollen: morphology, physiology and taxonomic significance
Ágnes Farkas	Microscopic techniques for studying plant tissues
Ágnes Farkas	Techniques for investigating floral and pollination biology
Csaba Fekete	Molecular bases of host-microbe interaction
Zoltán Gazdag	Determination of antioxidant enzymes and molecules in yeast.
Róbert Gábriel	Classical and digital phtographic techniques
Róbert Gábriel	Current Neurobiology
Róbert Gábriel	Professional Biological English
Zoltán Gombos	Lipid-protein interactions in the cell functions of photosynthetic organs.
István Hernádi	Neurophysiology
István Hernádi	Neurobiology of learning and memory
István Hernádi	Behavioural neuroscience
István Hernádi	Psychophysiology
István Hernádi	Neurology
Éva Hideg	Green English
Éva Hideg	Speaking about science
Éva Hideg	Photosynthesis
Gyula Hoffmann	The History of Biology
Győző Horváth	Estimation and modelling of the animal populations.

Gábor Jakab, Éva Hideg	Plant stress physiology
Gábor Jakab Csaba Fekete	PCR: from basic principles to application
József Laczkó	Movement analysis, neuromechanics of human movements.
László Molnár	Experimental neuroanatomy
Tamás Morshhauser	Vegetation mapping
Tamás Morshhauser	GIS in Vegetation Science
Gábor Papp	Mycotoxins
Edit Pollák	Light- and electron microscopic mikrotechnique
Jenő Purger	Biogeography
Jenő Purger	Ecological aspects of animal dispersal
Jenő Purger	Behavioural ecology
Péter Putnoky	Bioinformatics
Péter Putnoky	Bacterial genetics
Éva Salamonné Albert	Taxonomy and systematics of non-flowering plants
Márk Váczi	Skeletal muscle mechanics
Márta Wilhelm	Fitness measurements
MártaWilhelm	Stress, sport and immune system

Annex 2.

Formal requirements of theses and dissertation

Body text of dissertation: font size: 12, Times New Roman, or 10 Arial; line-space:1,5; page number maximum 100 without appendix.
Front page must contain the names and signatures of supervisor(s) and the head of doctoral school.

(„Black"jacket, A/4)

UNIVERSITY OF PÉCS
(16 bold, capitals)

Doctoral School of Biology and Sport Biology
(12 lower case letter)

The title of PhD thesis
(16bold, lower case letter)

PhD thesis

(12 bold, lower case letter)

Name
(16 bold, lower case letter)

PÉCS, year

(16 bold, capitals)

(Front page, A/4)

University of PÉCS
(16 bold, capitals)

Doctoral School of Biology and Sport Biology
(12 lower case letter)

The title of the PhD thesis
(16 bold, lower case letter)

PhD thesis

(12 bold, lower case letter)

Name
(16 bold, lower case letter)

Supervisor:
(12 lower case letter)

Name

(12 bold, small letter)
academic degree
(12 bold lower case letter)

PÉCS, year

(16 bold, capitals)

(Thesis (abstract) front cover, A/5)

UNIVERSITY OF PÉCS
(16 bold, capitals)
Doctoral School of Biology and Sport Biology
(12 lower case letter)

Title of the PhD Thesis
(16 bold, lower case letter)

PhD Thesis

(12 bold, lower case letter)

Name
(16 bold, lower case letter)

Supervisor:
(12 lower case letter)

Name

(12 bold, lower case letter)
academic degree
(12 lower case letter)

PÉCS, year

(16 bold, capitals)

Statement on the originality of the PhD thesis and papers

Undersigned
name:.....
birth name:.....
mother's maiden name……...
place and date of birth .....

Today I submitted my PhD thesis entitled:
.....
.....
.....
to (name of Doctoral School)
.....
Name of supervisor(s)
……
In addition I declare my doctoral dissertation submitted in the present case

- had no submitted other doctoral school (not domestic nor abroad university) earlier,
- my application to doctoral process is not rejected within two years,
- I had no unsuccessful doctoral procedure the last two years
- my doctorate degree has not cancelled within five years,
- my thesis is an independent work, I have not presented another person's intellectual property as it would be mine, the references are clear and complete, the false or falsified data are not used in my dissertation.

Date:.....

.....
signature of candidate

Annex 3.

Guidelines for opponents for the PhD dissertations

PhD candidates are required to submit their dissertation witch must be based on their original scientific research. The purpose of the examination is to ensure that the doctoral dissertation meets the set scientific and formal requirements before permit on defend. In order to increase the professional status of the PhD degree, which can be got on UP Doctoral School of Biology, independent reviewers' are asked to evaluate the dissertation before the public defense. In order to have objective assessment of the dissertations, the criticism are made taking into account the uniform criteria.

The opponent should in her/his assessment consider in particular the following aspects:

1. An evaluation of the significance originality and novelty the research conducted by the candidate within the research field internationally. What are the quality of the doctoral candidate's observation and the applicability of the results for the further research?
2. An evaluation of the structure, proportions of the chapters and the logical construction of the dissertation.
3. An evaluation of doctoral candidate's proficiency in the research field and her/his theoretical background and familiarity with the pertinent literature.
4. An evaluation of the adequacy of the research material and methological approach for solving the problem in question.
5. An evaluation of the he scientific justification of results and conclusions, criticism and the candidate's ability to compare her/his results to previously made and link them to the research field more broadly. What are the scientific value of the results?: To call attention to the controversial issues (these are discussed with reference to public defense).
6. It is desirable for opponent to put questions and remarks about results or conclusions as well as the critical conclusion should be mentioned with regards to the result.
7. An evaluation of the presentation, tabulation, consistency, clarity, style and the proper usage of language of the dissertation. (figures and other demonstration material).
8. It is desirable that opponent ready the review on the language of the dissertation. If the language of the defense differs from it, then on the language of the defense.
9. It is desirable that opponent' statement ends with a brief summary commenting, emphasize the recommendation (without an exact classification) that the dissertation is suitable (not suitable) for the final defense, and subsequently, after the successful presentation the candidate obtain the PhD degree.

Annex 4.

Minimum requirements of habilitation

1.	**Teaching/ education enhancement activity**	**Evaluation**	**Comment/explanation**
1.a. +	Lecture/ practice keeping. (minimum. 8 semesters, 2 points/lecture, 1 point/practice) Must be a minimum of 8 points, but can be up to 14 points.		If the minimum and maximum point is specified, of the minimum point required to meet, and the maximum point can be calculated as a maximum.
1.b.	OTDK supervisor: 2 points/paper, OTDK rankings (I-III) +2 ponits, PhD supervisior:4 points/student (minimum. 4, maximum. 14 points)		Co-supervising shall be calculated by a factor of 0.5. Each started PhD are taken into account. Not the number of students, but the number of OTDK papers important.
1.c.	English (German)-language education or foreign student reception. 2 points/semester (maximum. 6 points)		
1.d.	Textbook, lecture notes (8 points/printed, 4 points/electronic lecture notes) maximum. 8 points		The number of co-authors and the volume of lecture notes are considered by the commission.
1.e.	Supervisor in thesis for BSc or MSc degree (1point/thesis) maximum. 8 points		The debated thesis counts only.
	Σ Teaching/ education enhancement activity - minimum 30, maximum 50 points		**Minimum requirement: 30 points**
2.	**Academic successes**		
2.a.	Impact index minimum: Experimental biology: 12 points; supraindividual biology: 7points§ Must be a minimum of 15 points		§ This value point of supraindividual field will rise with 1 impact index point in every two years, as long as, reach the desired value in experimental biology.
2.b.	Over the minimum value each +0,5 impact index point shall be calculated as 1 point (maximum. 6 points)		
2.c.	80 independent WOS(Scopus/GoogleScholar) citations are minimum requirement : 5 ponts		150 pieces of MTMT validated citations in supraindividual field are acceptable.
2.d.	Over the 80 citation each one shall be calculated as +1 point (maximum. 5 point)		80 piecse of WOS citation or above 150 independent ones shall be calculated as +1 point. (maximum. 5 points)
2.e.	First or last authorship of at least three papers have impact factor. (minimum requirement): 5 points		One english-language, peer reviewed journal articles but without IF is considered in supraindividual field.
2.f.	For every additional first or last authorship shall be calculated as + 0,5 point. (maximum. 2 points)		English-language, peer reviewed journal articles but without IF is also considered in supraindividual field.
2.g.	Head/ member of grants (international 2 points/year, Hungarian 1 point/year - member 0,5 multiplier) maximum.: 8 points		Person can be listed in the grant. In the case of high-volume syndicate grant, the sub leaders may also be accepted as the project leader.
2.h	International relations (proven joint research, 2 points/project, maximum. 4 points)		The minimum necessity a supporting letter from the partner to demonstrate the cooperation.. In the case of the joint grant or publications certificate do not have to hand in.
	Σ Academic successes - minimum. 30, maximum. 50 points		**minimum requirement: 30 points**

	ALL POINTS (minimum requirement 70 points)		Point from the field of teaching and research activity should be slightly complement each other.40+30 or 30+40 points is analogous.

At least 75% of the candidate's scientific activity (publications, citations, paper's number) must be belong to the chosen field (supraindividual or infraindividual biology). Furthermore, the lecture and the academic performance also must be taken on the same scientific theme.

Annex 5.

Assessment aspects of the application for habilitation

1. **Teaching and education enhancement activity in higher education,**

- activity in higher education
- curriculum development activity
- participation in PhD education
- quality evaluation of higher education activity
- organizational activity in higher education
-

2. **Participation in the scientific education, scientific school establishing, assessable results of leading activity in research work and education.**

- connecting to domestic and international research areas,
- evaluation of new results, the number of impact factor and citations

3. **The results of the public and scientific affiliations**

- national and international memberships,
- membership of the board of journals, reviewer activity
- managing and organizing work in the scientific and educational fields.

Annex 6.

Applying to the BDS is only possible electronically, via the website http://www.ttk.pte.hu/felvetelizok/doktori-iskolak/jelentkezes, by filling in the current forms provided there and submitting the necessary attachments by the deadline.

Annex 7.

Administrative fees.

The tuition and administrative fees of PhD students.

According to the Rules of Faculty of Sciences the candidates have to pay the following administrative fees.

a, Doctoral processing fee: quadruple of the current public employee supplement base
b, PhD exam fee: the sum of the current public employee supplement base,
c, PhD defense fee: six times of the current public employee supplement base,

Accordingly, the current administrative fees of Doctoral School of Biology and Sport Biology:

Doctoral processing fee:	100 000Ft.
PhD exam fee	40 000Ft (three-year training)
PhD defense fee:	160 000Ft

If the body text volume of the dissertation longer than those one fixed in by the operational regulation of doctoral school (100 page) 50% surcharge fee will be charged.
PhD degree award procedure for students in state-funded training is free of charges during the existence of student status. The different part of PhD degree award procedure are considered as accepted after the approving decision of the DHCS.

Annex 8.

Doctoral exam subjects of the tree-year training in the Doctoral School of Biology and Sport Biology

Main subjects:
Cell biology of neuron
Animal ecology
Genetics
Fungal ecology
Forest communities of Hungary
Treeless plant communities of Hungary
Mycology
Microbiology
Molecular biology
Movement regulation
Neuroanatomy
Neurobichemistry
Neurobiology
Neuropharmacological toxicology

Neurophysiology
Neurology
Plant physiology
Plant Taxonomy
Plant communities
Plant morphology
Principle of immunology
Psychophysiology
Sport biology
Virology

Side subjects:
Allelopathy
Anatomy and taxonomy of epidermis
Archeobotanics
Biomechanics
Computer analyses of sequence
Conservation biology
Development biology
Electrophysiology
Examination methods of animal populations
Farmacobotanics
Feeding ecology
Flower anatomy
Flower biology
Flower morphology
Histotechniques
Human pathogenic yeast
Hydro-ecology of flowing waters
JNP models
Load physiology
Microbiological biotechnology
Molecular analyses of yeast cells
Neurobiology of sense organs
Neuroendocrinology
Neuroimmunology
Patterns and mechanism in vegetation dynamics
Photosynthesis
Phythogeography of Hungary
Phytochemistry
Plant stress physiology
Pollination biology
Recombinant DNS techniques
Separation techniques
Sport feeding
Sport psychology
Statistical methods in supraindividual biology
Syndinamics

Trends in vegetation research methods
Vegetation dynamics
Weed biology
Yeast genetics

Annex 9.

Subjects of midterm complex exam of the Doctoral School of Biology and Sport Biology

From Sport Biology

Main subjects:

1. Sport biomechanics.
2. Sport physiology.

Specialty subjects:

1. Biological markers and physical activity. Fitness examination.
2. Sport biochemistry. Metabolism and physical activity. Endocrinological changes due to physical activity.
3. Stress and its relation to physical activity. Performance examination methods.
4. Circulatory and pulmonary physiology. Influence of physical activity on the cardiovascular system.
5. Motor control. Neuro-mechanical bases of skeletal muscle functions.
6. Sports anthropometry. Methods of sport biomechanics.
7. Sports psychology. Legal and illegal performance enhancers.
8. Sports hygiene, spors nutrition.
9. Sports pedagogy. Sport didactics.

From Regulatory Biology

Main subjects:

1. Comparative neurobiology.
2. Cell biology of the neuron.

Specialty subjects:

1.Neuroanatomy.
2.Neurobiochemistry.
3. Neuropharmacology and neurotoxicololgy
4.Neurophysiology.
5,Neurology.
6.Psichophysiology.
7. Neurobiology of the sensory organs
8.Electrophysiology.
9. Histotechnology.

10.Neuro-endocrinology.

11.Neuro-immunology.

From Genetics and Microbiology

Main subjects:

1.Genetics.

2. Microbiology.

3. Virology.

Specialty subjects:

1,Yeast genetics.

2,Molecular analysis of yeast cell life processes.

3,Separation technologies.

4,Developmental biology.

5,Mikrobial biotechnology.

6,Rekombinant DNA technics.

7,In silico sequence analysis.

8,Bioinformatics.

9,Applied clinical microbiology.

10,Applied industrial microbiology.

11,Applied environmental microbiology.

From Synbiology

Main subject:

Synbiology.

Specialty subjects:

1,Ecology of running waters.

2,Biogeography.

3,Biostatistics.

4,Biology of Invasions.

5,Conservation biology.

6,Community ecology.

7,Population ecology.

8,Suprainformatics.

9,Syndynamics.

10,Vegetation science .

11,Behavioral ecology.

12. Population genetics

From Plant Biology

Main subject:

Plant biology.

Specialty subjects

1. Stress physiology of plants.
2. Photosynthesis.
3. Plant anatomy.
4. Plant morphology.
5. Phytochemistry.
6. Hormonal regulation in plants.
7. Molecular biology and genetics of plants.
8. Plant biotechnology.
9. Morphology and physiology of grapes.