

Quality assurance plan of the Juhász-Nagy Pál Doctoral School

2025

1. Identification data of the doctoral school

1.1 Code number: 60

1.2 Institution: University of Debrecen, Faculty of Science and Technology

1.3 Field of science classification: Biological sciences, Environmental sciences

1.4 Name of the doctoral school: Juhász-Nagy Pál Doctoral School

1.5 Year of accreditation: 200 (based on the legal predecessors in 1993)

2. Head of the doctoral school: Dr. Attila Molnár V., university professor

Doctoral school programs:

Applied Ecology Program (Dr. Tibor Magura)

Biodiversity and Climate Change Program (Dr. Tamás Székely)

Botany Program (Dr. Attila Molnár V.)

Evolutionary and Diversity Biology Program (Dr. Zoltán Barta)

Fermentation Biotechnology and Biochemical Engineering Program (Dr. Levente Karaffa)

Functional and Restoration Ecology Program (Dr. Péter Török)

Hydrobiology Program (Dr. István Grigorszky)

Plant Biology and Biotechnology Program (Dr. Gábor Vasas)

Quantitative and Terrestrial Ecology Program (Dr. Edina Kundrát-Simon)

The work of the Head of the Doctoral School is assisted by the Doctoral School Council (hereinafter Council). The members of the Council are the head of the Doctoral School, the heads of the doctoral programs, the secretary of the doctoral school, the annually elected student representative of the Doctoral School.

The heads of the doctoral programs and the secretary of the Doctoral School have the right to vote.

The members of the Council are appointed or dismissed by the University/Faculty Doctoral Council on the proposal of the head of the Doctoral School.

The task of the Council is to ensure the high standard of training and degree acquisition, as well as the accessibility of the doctoral students to the intellectual potential and material conditions of the Doctoral School.

The Council decides on and publishes the educational programs, assignments of supervisors and thus the right to announce the doctoral topics annually.

3. Quality assurance plan

The Doctoral School's admission, study obligations, scholarship disbursement, the method of study evaluation methods and the conditions for their completion are contained in the Doctoral Regulations of the Faculty of Science and Technology of the University of Debrecen.

The core members, supervisors and lecturers of the Doctoral School are invited by the secretary of the doctoral school to participate in the work of the Doctoral School based on the proposal of the head of the Doctoral School.

Admission to the Doctoral School

When applying to doctoral school, according to the doctoral regulations, requirements are defined that to create safeguards regarding the quality of doctoral students' work. According to the university regulations, language proficiency is a prerequisite, a diploma with at least a cum laude grade, and a well-thought-out research plan.

Scoring of the doctoral admission process

- In the first category, the admissions committee will evaluate the candidate's professional knowledge, their plans for research to be conducted during doctoral studies, and the justification for those plans. This assessment can be conducted through an oral exam and/or a written application based on a research plan. A maximum of 40 points can be earned.
- The second category evaluates the candidate's previous academic achievements. This could be an indicator derived from the cumulative GPA of completed semesters and/or an evaluation of the degree earned in university/master's studies. A maximum of 30 points can be earned.
- The third category is used to evaluate the scientific "background," with points awarded based on documented products (publications, student research papers, etc.). The scoring criteria are the same as those outlined in 2. c) of Section II in the DE Talent UD Program Regulations with products that can be recognized with performance credits. A maximum of 30 points can be earned. The scoring is determined by the doctoral admissions committee based on the following categories:

20–30 points:

- First-authored peer-reviewed journal publication ("in extenso")
- OTDK award-winning presentation, 1st–3rd place
- National design competition, 1st–3rd prize (or the purchase of the design)
- Certified domestic or international artistic, professional competition achievements

10–20 points:

- First-authored peer-reviewed journal publication
- First-authored, non-local, and non-TDK presentation, poster

- OTDK presentation (and/or paper), not awarded
- National design competition, not awarded

0–10 points:

- Not first authorship, not a TDK presentation, poster
- Presentation at a local, student (non-TDK) conference
- Displaying the certificates at a public exhibition
- Certified concert performance

The requirement for admission is an intermediate C-type language exam, for which points cannot be earned. Performance on language exams beyond this level can be rewarded with extra points. An intermediate C-level language exam is worth 3 points, while an advanced A or B-level exam is worth 5 points.

Training

Students admitted will receive an eight-semester training. The first part of the training is the training and research phase (semesters 1-4), after which successfully passing the comprehensive exam is a prerequisite for entering the second, research and dissertation phase (semesters 5-8). The condition for successful completion is earning a total of 240 credits.

In compiling the program, we aim to achieve a dual purpose. We require doctoral school applicants to have internationally acceptable research results in the study of life processes at various levels, and we expect the courses provided to students to reflect current modern trends in their subject matter and methods.

The Doctoral School prescribes the following research and study tasks for PhD students admitted and participating in the training. During the 4-year (8-semester) study period, the PhD student completes 240 credits. After the 4th semester, they take a comprehensive exam according to the prescribed regulations, and after the 8th semester, they defend their PhD dissertation.

The 240-credit study requirement can be fulfilled as follows.

Doctoral students can earn academic (training) credits through studying and passing exams. Generally, one credit can be earned over a semester by attending one hour of lectures per week and taking an exam. For doctoral students enrolled after September 1, 2016, the number of mandatory study (training) credits to be completed is 12-20. The Doctoral School Council may determine the number of mandatory academic (training) credits to be earned in one semester. The completion of credits – based on the exam, paper, report, etc. prescribed for the subject taken – is certified by the lecturer listed in the subject's index. Credits can only be assigned to a subject that is graded on a five-point or three-point scale.

During the training, the doctoral student earns the vast majority of the required credits (180-228 credits) as research credits. 1 credit: 30 working hours. The completion of credits is certified

by the supervisor in the index. The continuous completion of the research work must be certified by the supervisor every semester in Neptun by signing the subject with the appropriate code number and credit value. The research work does not need to be graded or assessed.

According to the decision of the Council, teaching credits can be awarded for the educational activities performed by the doctoral student. A maximum of 40 credits can be earned from this activity during doctoral studies. 1 credit: 1-2 hours of teaching activity per week for one semester, depending on the nature of the task. The educational task and its credit value must be included in the (electronic) index. The completion of the task is certified by the head of the organizational unit responsible for the given educational module.

Every doctoral student is required to report on their research progress to the program's faculty and doctoral students once a year. The presentation, which is desired in an illustrated format, will be followed by a discussion aimed at developing the doctoral student's debating skills. We will inform all those involved in the doctoral school about these presentations, and school members can attend them.

The condition for being granted the absolutorium is that the candidate has the number and distribution of credit points specified in the Doctoral School's regulations.

After completing doctoral studies, the Council, after consulting the supervisor's opinion, decides on admission to the doctoral degree procedure. The rules for authorizing the degree awarding procedure following individual preparation are specifically laid down in the doctoral regulations. The condition for initiating the dissertation process is the publication of two publications with an impact factor.

The complex examination must be taken before a committee. The committee is established by the doctoral council of the faculty/university, consisting of individuals with doctoral degrees. At least one-third of the committee members are external experts who are not employed by the university and did not participate in the candidate's thesis supervision.

Prerequisites for submitting a doctoral dissertation, publication requirements

Quality assurance is an important tool to ensure that candidates have a sufficient number and quality of publications by the time of their defense. Publication of a sufficient number of studies with an impact factor related to the candidate's topic, as determined by the Council, as a condition for defense. In addition, candidates must demonstrate their independent scientific work, which they can do by presenting at national and international conferences. The suitability of publications for defense is evaluated by the Council for all candidates as a condition for being allowed to defend.

A prerequisite for submitting the dissertation is holding an internal defense (pre-defense), during which the pre-opponents must declare whether the manuscript and its defense meet the PhD level.

The condition for submitting the dissertation is the publication of two impact publications.

The doctoral dissertation must be defended in a public debate before the examining committee. The University is responsible for the publicity of the event. The chair of the examining board is a professionally competent professor at the university; the chair and members of the board

are appointed by the Doctoral Council of the Field of Science based on the recommendations of the university and the doctoral school. At least 1/3 of the committee should be external experts. Distinguished representatives of the profession should be invited to the discussion, and the invitation should include a summary of the dissertation and the theses presenting the new results. Both the thesis booklet presenting the doctoral dissertation and the dissertation itself must include the name of the supervisor, the opponents (at least one of whom must be an external expert), and the name of the institution, and if the candidate worked at an external institution, the name of that external institution as well. When archiving or publishing the doctoral dissertation, in addition to the above, the names of the members of the evaluation committee must also be attached.

The doctoral degree is awarded by the university doctoral council based on the results achieved according to the regulations and the recommendation of the Doctoral Council of the Field of Science.

Publicity, the application of ethical principles in science

An accepted principle of quality assurance is that doctoral students and researchers participating in the doctoral school publish their achieved results in international and Hungarian journals, adhering strictly to ethical considerations. This fact clearly ensures the transparency of the results. Since 2001, students have participated in the Science Day events organized by the Institute of Biology and Ecology every year. Every year, the Institute and the Doctoral School create a speaker forum for PhD students. PhD supervisors and students always pay close attention to the thorough adherence to regulations, human health and animal welfare guidelines. The human behavior of the supervisors and the human and professional atmosphere created in the laboratories are always a guaranty for the enforcement of scientific ethical principles.

Date: 10 October 2025