

Information for students of Doctoral Study Programmes in Biomedicine

The rights and duties of students are governed by the Higher Education Act, internal regulations of Charles University and internal regulations of the faculties of Charles University. This material for students of Doctoral Study Programmes in Biomedicine is of a recommendatory nature.

The “Information” therefore does not have a status of obligatory document for students, it shall rather ease the students and their supervisors a basic orientation in the regulations and give advice namely what concerns the holding of the state doctoral examinations and elaboration of the doctoral dissertations. All study requirements inclusive the supposed date of their fulfilment must be mentioned in the individual study plan.

“Information” is created on the basis of the Framework Agreement of Cooperation in the Implementation of Study Programmes and the Association Agreement, contracted between the Charles University and the Academy of Sciences of the Czech Republic on the 13th of March 2007 pursuant to the Act No. 111/1998 Col., on higher education, as amended, and the internal regulations of the Charles University and of its faculties.

State Doctoral Examination

- 1) As a prerequisite for state doctoral examination being held, a student must fulfil his individual study plan, which shall, among others, specify the following obligations (not applicable for students of the Faculty of Science of CU, who abide by the regulations of the faculty):
 - a) Certificate of attendance of a least two subjects (one can be completed in abroad, as a rule);
 - b) Passing the examination of English language (holds for those study programmes which have the language examination in their accreditation);
 - c) Co-authorship (or the first authorship respectively) of one impacted publication as a minimum;
 - d) Submitting the survey of literature. That means a text describing and critically evaluating contemporary facts in the field of science studied. The source knowledge enables the student to formulate his scientific hypothesis as well as questions that may lead to its approval (dismissal). The text shall contain also a proposal of the hypothesis and objectives of a solution. The scope of the survey is 15-20 pages (the layout of 1 page is in the annex).
- 2) The state doctoral examination shall take place before the defence of doctoral dissertation, unless a different order is stipulated by the study programme. Upon proposal of subject area board, the deans set the dates of examinations and publish them on the official board of the faculty not later than one month before the respective date of state doctoral examination.
- 3) The chair and members of the state doctoral examination board are appointed by the dean of the faculty upon debate of the subject area board. The number of members of the examination board present shall not be less than five. As a rule, the supervisor or the

consultant is a member of the board (but they must not be appointed a chair). At least one member of the board is not a member of the faculty the student enrolled in.

- 4) The examination is oral and public.
- 5) The examination board discusses the result of examination in a closed meeting, which follows up immediately with the respective examination, and decides upon by a majority of ballots of present members. By even division of votes, the vote of the chair prevails. The result of examination is expressed on two grades' scale: "passed" or "failed".
- 6) On the examination and its result, there shall be a written record signed, when completed, by the chair and present members of the examination board. As soon as the closed meeting of examination board comes to its end, the chair shall notify the student of the result of examination and fill the result in the student record book. The chair of examination board shall send the record of examination to the respective division of the dean's office of the faculty.
- 7) As a rule, the examination is taken not later than 3 months after a written application has been submitted. This application shall be filed with the subject area board via the respective division of dean's office.
- 8) A student can repeat the state doctoral examination only once.
- 9) On the basis of student's written application and upon a recommendation of subject area board inclusive a written agreement of supervisor, the dean can recognize the fulfilment of control of study of a subject (e.g. English language examination) provided the student met a comparable study obligation at a university or another higher education institution in the Czech Republic or abroad during the last ten years.

Doctoral Dissertation

- 1) The doctoral dissertation is written in Czech as a rule, the use of a foreign language is possible in accordance with the rules of faculties.
- 2) A student can elaborate his doctoral dissertation in the regime of "cotutelle" (under dual supervision). This approach, founded on cooperation with foreign universities, enables the doctoral student ("doctorand") to elaborate a part of his doctoral dissertation in a workplace abroad under the supervision of experts of both universities. For more details, see "The guidelines for preparation of an agreement for a bi-nationally supervised doctoral thesis ("cotutelle") between Charles University and a foreign university", accessible from <http://ff.cuni.cz/FF-275-version1-metodicke.doc> .
- 3) A prerequisite for submitting a doctoral dissertation are two original works (related to the topic of dissertation) accepted to publication in internationally reputable scientific journals of an aggregate defined "impact factor" higher than 1,0. Of one publication at least, the student shall be the first author, if stipulated so by the individual study plan or internal regulation of the faculty. The doctoral dissertation shall be submitted to the subject area board via the division of dean's office, either in the classical form or in the form of a mono-topical anthology of at least 4 scientific publications related to the subject (2 of that

as a minimum with “impact factor”), if stipulated so by the individual study plan or internal regulation of the faculty. The doctoral dissertation shall be filed in four hardback exemplars for approval with the deans and simultaneously in electronic form (see rector’s action No 6/2010).

- 4) Along with doctoral dissertation, the subject area board is submitted the summary report in Czech or English language (with the summary / abstract paper in Czech or English), elaborated in accordance with the guidelines published on the web pages of Doctoral Study Programmes in Biomedicine. The summary report shall facilitate, for the members of the board for the defence of doctoral dissertation, their orientation in the scientific work of the student, and must comprise the aim of the work, the methodology, main results, summary and list of publications of the author (see annex). The respective division of dean’s office shall send the reproduced texts to the deans, board members and the presidium of the Coordination Board.
- 5) The rules for registering, submitting and publishing of theses (inclusive doctoral dissertations) are determined by the Code of Study and Examination of Charles University in Prague, Rector’s Measure No. 6/2010 and Rector’s Measure No. 8/2011, and measure of the dean of the faculty the student enrolled with.

Rules for Writing a Doctoral Dissertation

- 1) A doctoral dissertation in a classical form has the following subsections:
 - a) Start page – layout according to the template (annex);
 - b) Declaration of independent elaboration of doctoral dissertation (annex);
 - c) Identification record;
 - d) Literary introduction and survey of the research problems in question;
 - e) Definition of objectives of the work, inclusive specification of hypotheses;
 - f) Description of experimental methods used, inclusive statistical ones;
 - g) Survey of achieved, properly documented and adequately statistically evaluated own results;
 - h) Discussion of methodologies used and results, inclusive comparison with the literature;
 - i) Conclusions and evaluation of objectives and hypotheses of the work;
 - j) Summary (in Czech and English language)
 - k) List of literature used
- 2) Citations in text shall be by names and year (Author J., 1989). If there is one author, please, fill in one author and year, if there are two authors, fill in both and year, at three and more authors, fill in: Author et al., year. The citations should have the standard form: year of publication, volume of journal, number of journal, pages (from-to).
- 3) A doctoral dissertation based on the mono-topical anthology of at least 4 scientific publications shall be elaborated in classical manner (see paragraph 1, inclusive a summary discussion to the individual publications).
In the commented doctoral dissertation too, there should be schemes and figures documenting the crucial discoveries brought by the work (see above).

- 4) A classical doctoral dissertation should have at least 60-80 pages without the cited literature and annexes. The work based on as a minimum 4 published papers should have at least 30-40 pages without the cited literature and annexes.

Defense of Doctoral Dissertation

- 1) Number of present members of the board shall not be less than five. The chair and members of the board for the defense of doctoral dissertation shall be appointed by the dean of the respective faculty upon proposal of subject area board.
- 2) The board shall appoint two external examiners. The external examiner must be an associate professor (docent), professor or person who was conferred the title of Ph.D., CSc., DrSc. or Dr. The external examiner must not be the supervisor or staffer who took part in the elaboration of the doctoral dissertation or is a co-author of any of the submitted works of the student.
- 3) The chair of board shall send the doctoral dissertation via the respective division of dean's office to the external examiners together with the advice of appointment as external examiners not later than one month after the application for defense has been filed.
- 4) Each of the external examiners shall supply his expert report not later than two months, after the work has been delivered to him, or, within 14 days, notify of not being able to elaborate the report. If the expert report is not supplied, even after a reminder, or the external examiner has notified of not being able to elaborate it, the board shall appoint a new external examiner. Before the very defense, the respective division of dean's office shall send the reports to the student and the president of subject area board. The appointed external examiners can be members of the board for the defense. In the very defense, at least one of the appointed external examiners must take part.
- 5) The defense of doctoral dissertation is public. It takes place within 6 weeks from the delivery of the external examiners' reports, as a rule.
- 6) The board decides on the classification of defense of doctoral dissertation in a closed meeting, which follows up immediately with the respective defense, by ballot. The classification grades are "passed" or "failed". The board decides upon by a majority of votes of present members. By an even division of votes, the vote of the chair prevails.
- 7) The chair shall notify the student of the result of defense immediately after the closed session of the board and shall do it in public. In case of unsuccessful defense, the board determines, whether it is necessary to rewrite the work or to supplement it. The defense of doctoral dissertation can be repeated only once, not earlier than 6 month after the original date of holding the defense.

Updated 1.2.2013