

Guidelines for candidates admitted to the doctoral degree philosophiae doctor (PhD) at the Faculty of Mathematics and Natural Sciences

Adopted by the Faculty Board 2 July 2003, amended 2 March 2005 and 8 March 2006

A. AIMS AND STRUCTURE

(Relating to section 1 of the Regulations: Aims)

The Faculty of Mathematics and Natural Sciences administers the Dr. philos. degree in addition to the PhD degree. The faculty considers these two degrees to be of equal stature. The faculty expects that the Dr. philos. degree is only used by candidates who have not taken part in any formalized research programme.

B. ADMISSION

(Relating to section 2 of the Regulations: Admissions)

B.1 The applicant's formal competence

To be admitted to the PhD programme the applicant must normally have completed the master's degree or equivalent at a Norwegian university or college. An applicant may be admitted without such an education if she or he is able to document a corresponding academic level. Applicants with education from abroad must submit an assessment of the scope and content of the education. Education from abroad corresponding to at least four years in the Norwegian university system may be accepted as the grounds for admission pursuant to an individual assessment.

If the academic community finds that the applicant does not have the required knowledge in the academic field, the faculty may on recommendation from the academic community set additional requirements beyond the compulsory training component of the PhD programme.

When assessing applicants the faculty's research programme committee may require that the necessary academic level is documented, for example by having applicants to complete designated courses and/or pass designated tests prior to admission.

B.2 Evaluating formal competence

For applicants to scholarship positions, the faculty's hiring body must approve the grounds for admission in connection with the appointment, unless the applicants have already been admitted to the PhD programme. The grounds for admission are evaluated in relation to the academic field the scholarship position is in. The research programme committee at the department and/or faculty level may assist the hiring body when necessary.

B.3. Admission criteria

To be admitted to the PhD programme the average grades attained in the specialization during the bachelor degree, master's subjects and the master's thesis, respectively, must be C or better.

B.4. Applications and admission

Applications for admission to the PhD programme must be written on a separate application form which may be downloaded from the Internet at <http://www.uib.no/mnfa/research/forskerutdanning.php>. Admissions are made continuously throughout the year.

The faculty is the formal admissions authority, but the initial assessment of applications is undertaken by the departments. The departments process applications pursuant to the provisions in force at any time. In simple cases the departments complete the processing of the application. The faculty is notified about the outcome and may reverse the decision. Applications from candidates with non-traditional education must be forwarded to the faculty. If education from abroad constitutes the entire qualification or the main qualification for admission, the processing of the application must be completed by the faculty after a recommendation from the department.

The department must ensure that suitable supervisors and the necessary equipment is available for completing the research project.

C. CONTRACTS

(Relating to section 3 of the Regulations: Contracts)

The contract must be signed by the candidate, supervisors, the department and any external parties. The contract must be sent to the faculty for their information.

Major changes in the matters dealt with in the contract must be approved by the department.

D. THE RESEARCH PROGRAMME

(Relating to section 4 of the Regulations: Research programme)

D.1 Time limits and maximum time for studies

The PhD programme must be completed (date of the defence) within eight years after admission. Periods of leave are not included in the PhD programme period. If the training has not been completed within this frame, the PhD programme must be terminated. Any decision as to the fact that the maximum PhD programme time has been exceeded must be made by the faculty and may be appealed pursuant to the provisions in sections 28 ff of the Norwegian Public Administration Act. An appeal with the reasons for the appeal must be lodged with the faculty. If the decision is upheld, the appeal shall be submitted to the Central Appeals Board for a decision.

D.2 The training component

D.2.1 Content

The training component shall comprise 30 credits and include the following:

Part 1: Formal part

Subjects at the 200 level or higher, researcher courses and/or special syllabuses must comprise 25-27 credits (depending on the number of credits in the presentation section), including training in science theory and ethics. Candidates who have studied science theory/ethics in previous education do not need to take this again for their PhD programme. The training component must nevertheless include a total of 30 credits.

National and international research courses lasting five full working days are awarded two credits. Requirements for documentation of the scope and content of the course are the responsibility of the candidate and the course organiser. No reports or examinations beyond what might be included in the course are required.

Part 2: Outreach

Three to five credits are awarded for presentation. All the components of this section must normally be completed after an application for admission to the PhD programme has been

submitted or appointment to a scholarship position has been effected. Activities that might be included are:

- Knowledge presentation course
- Participation at international conferences with presentation of results from the candidate's research results. International conferences do not include national meetings with invitation of speakers from abroad. Two credits are awarded per conference. Maximum one conference.
- Popular-science contributions in the candidate's field. Up to two credits per contribution. Maximum two credits.
- Seminar/lecture on self-selected topic. One credit. Duration of one lecture hour. Maximum one credit. The seminar/lecture must be open to everyone and be announced two weeks in advance. The topic must be proposed by the student and the supervisor and approved by the department. The department convenes a committee with two members to evaluate the seminar/presentation. The same criteria as for the trial lecture apply (see point I). The committee must send the outcome of the evaluation to the department.

Scientific articles that are not part of the dissertation are *not* awarded credits in the training component.

The content of the training component must be such that together with dissertation work and previous training it provides the necessary academic scope and in-depth studies that are embedded in the objectives for the research programme.

Each department may within the stipulated framework draw up regulations for how the training component is to be carried out. The regulations must be approved by the faculty.

D.2.2 Level

The faculty does not approve 100-level subjects as part of the training component. If such subjects are considered necessary as preparatory knowledge for other subjects or the research task, these must be taken outside the framework of 30 credits.

During the training component subjects taught at other faculties or departments may be useful. When in doubt as to whether the subject is at an acceptable level, it must be evaluated by a relevant academic community at the faculty.

Descriptions of special syllabuses must make it possible to evaluate the content, level and scope. The type of examinations must also be stated.

For examinations in subjects and/or special syllabuses, achievement must correspond to a grade of C or better. In cases where the grade scale used is Pass/Fail, pass shall correspond to a grade C or better. Unless a subject or course has a stipulated grade scale of Pass/Fail, letters shall be used to designate grades. For an examination in a special syllabus letter grades must be used.

If examinations passed previously are used in the training component, it must be documented that they have been passed with a satisfactory result.

D.2.3 Miscellaneous

The department determines the type of exam for subjects and special syllabuses that are part of the training component. Exams may at the latest be taken one month before the defence.

Examinations that are older than five years on application for admission may not be used in the training component. If a PhD candidate does not pass one of the examinations in the training component, the earliest a new exam may be taken is during the following semester.

Applicants who have started a PhD programme (or equivalent) at another institution may apply for approval of completion of a part of the organized research programme on admission. The programme that has been completed must be documented in writing and must be evaluated as to scope by the faculty on the basis of a recommendation from the department where the candidate is applying for admission. Activities that are approved under the presentation section must be completed after the research programme at the other institution was initiated.

D.3 Supervision

The PhD programme is a supervised research programme. This means that the candidate must stay at the university for a substantial part of the effective time of study, unless otherwise indicated by special circumstances.

An evaluation committee consisting of at least two members must be appointed. At least one of the members must be from the department the candidate is affiliated with.

D.4 Reports

The departments are responsible for oversight the PhD candidates. The candidate and the supervisor must draw up separate annual reports describing progression in the studies. The reports must be sent to and approved by the department's research programme committee.

PhD candidates who do not submit progress reports after the second reminder will have their right to study terminated. They would then have to re-apply for admission to the PhD programme.

D.5 Six-month reports

Six months before the planned defence the PhD candidate must apply for approval of the training component to the department's research programme committee. The application must include all the necessary documentation of the activities carried out in the training component. If all the activities have not been carried out, the PhD candidate must enclose a plan for completion of the training component. The department's research programme committee processes the application and sends a reply letter to the candidate. The faculty must receive copies of the letter and the documentation.

E. TERMINATING SUPERVISION

(Relating to section 5 of the Regulations: Terminating the organized research programme before the stipulated time)

A request to be released from supervision must be addressed to the faculty and must be sent through the academic unit. A copy of the request must be sent by the requesting party to the other party.

F. THE DISSERTATION

(Relating to section 6 of the Regulations: The dissertation)

The main results of the dissertation must be publishable. Responsibility rests with the candidate and the supervisors to consider suitability for publication when selecting research projects. During dissertation work the general rule is that parts of the thesis must be published internationally.

The dissertation may be submitted as either a monograph or as inter-connected articles comprising a whole, with an introduction to the work together with an overview over the results and a thorough scientific discussion. The abstract must not only summarize but also collate the research question and conclusions that are presented in the individual parts of the work in a comprehensive perspective, thus documenting the cohesion of the dissertation.

The dissertation must preferably be written in English.

G. SUBMISSION

(Relating to section 8 of the Regulations: Submission, withdrawal)

Normally at least ten weeks prior to the planned defence the doctoral candidate must apply to the faculty to submit the dissertation for evaluation. The application must be submitted to the department together with four copies of the dissertation. The department shall then forward the application together with a proposal for an evaluation committee to the faculty no later than seven weeks prior to the planned defence. The proposed members of the evaluation committee must be legally competent.

The opponents can normally be disqualified if there is any collaboration between the opponent and the candidate or his/her supervising committee. This includes a joint publication in progress, joint publications within the past five years or any other form of collaboration. The leader of the committee can normally not have initiated any collaboration with the candidate leading to publications, have joint publications within the past five years or in any other form of collaboration with the candidate to be considered legally competent. See also the Norwegian Public Administration Act §§ 6-10, <http://www.ub.uio.no/ujur/ulovdata/lov-19670210-000-eng.pdf>.

Before the dissertation is accepted for evaluation, the supervisor must have submitted a statement identifying the candidate's input in joint work. The supervisor must also have submitted a statement recommending submission of the dissertation. This shall be kept secret from the evaluation committee.

H. THE COMMITTEE'S RECOMMENDATION AND PROCESSING THE RECOMMENDATION

The committee normally produces a recommendation with grounds to the faculty within five weeks after appointment, with any individual statements attached, stating whether the work is worthy of defence for a doctoral degree.

The doctoral candidate is given a time limit of two weeks to submit written remarks to the recommendation of the evaluation committee.

The recommendation from the evaluation committee with any remarks must be processed by the faculty's research programme committee. The dean may approve a committee recommendation when it unanimously concludes that the doctoral candidate should be allowed to make his or her defence.

I TRIAL LECTURE AND DEFENCE

(Relating to section 11 of the Regulations: Trial lecture and defence)

The topic for the trial lecture is decided by the faculty on recommendation from the department. The theme of the given topic shall normally not be taken from central research questions in the doctoral degree work. The trial lecture shall be given after submitting the dissertation but prior to the defence, and shall be evaluated by a three-member committee appointed by the department (all three members may be from the department).

The aim of the trial lecture is that the candidate is supposed to show ability to pass on research based knowledge. The lecture should normally be appropriate for an audience with a knowledge level comparable with students in second year at a bachelor programme.

The trial lecture shall have a length of one teaching period.

Both scientific skills and ability to pass on research based knowledge should be important in the evaluation.

If the committee finds that it cannot approve the trial lecture, the candidate is allowed another attempt. Agreement must be reached on a date for the new trial lecture and a new date for the defence, if necessary. A new trial lecture must be given on the same theme with the same committee evaluating it, and it must be given within 10 working days.

In cases where the committee invalidates the trial lecture, the committee's report must give the candidate clear instructions as to what must be rectified.

The department notifies the faculty about the date, venue and time for the trial lecture and defence. The faculty announces the defence and designates a chairperson for the defence. The trial lecture must be arranged by the department.

During the defence the opponents have equal roles and agree together on who should initiate and conclude the opposition.

The defence must normally be arranged at the University of Bergen. Doctoral candidates who are working at UNIS, Norgesnett scholars and doctoral candidates who have had their place of work at research institutions in the Bergen area may be exempted from this if an application for change of venue is approved.