

GOVERNING DOCUMENT

Subject area: Research and doctoral education

Document type: Guidelines
Decision-maker: Doctoral education committee
Organisational unit: Faculty of Natural Resources
and Agricultural Science
Reference: Gabriella Persdotter Hedlund

Decision date: 8 June 2009
Updated according to the Vice-Chancellor's
decision of 8 October 2012
Valid as of 1 January 2013
Valid until: further notice

Document(s) repealed: -

General syllabus for the doctoral programme in the
subject of:

BIOLOGY with specialisation in PLANT PATHOLOGY

Valid as of 1 January 2013

Department to which the syllabus applies	Subject code
AGRICULTURAL RESEARCH FOR NORTHERN SWEDEN	NLBIVÄ02
FOREST MYCOLOGY AND PATHOLOGY	NLBIVÄ00
PLANT BIOLOGY	NLBIVP00
CROP PRODUCTION ECOLOGY	NLBIVP02

The goals and design of the programme may vary between departments (see 4. Miscellaneous)

Regulations for third-cycle (doctoral) education at SLU

These can be found in the [Guidelines for third-cycle \(doctoral\) education](#) (reg. no SLU ua Fe.2012.40-3218) and [Admission regulations for third-cycle \(doctoral\) education at SLU](#) (reg. no. SLU ua Fe.2012.4.4-3467). These governing documents lay out rules and recommendations for *entry requirements, recruitment and admission, joint programmes leading to a double or joint degree, scope and content of the programme, planning and follow-up of the programme, procedure when a course or study programme is unsatisfactory, examination and degrees.*

General study plans for subjects within the doctoral studies can provide additional, subject-specific rules in addition to these joint rules. This document specifies the subject-specific rules for the subject biology with specialisation in plant pathology. In other respects the third-cycle studies in this subject shall adhere to the Guidelines for third-cycle education and the Admission regulations for third-cycle education at the Swedish University of Agricultural Sciences.

1. Purpose and objectives

After completing the programme, the student should be familiar with the general tools of science as well as the research methods that are typical of the subject field biology with specialisation in plant pathology. Plant pathology concerns the study of plant diseases, their nature and causes as well as measures that can help combat the development of plant diseases. Plant pathology can concern epidemiology, resistance biology, forest pathology, bacterial diseases, fungal diseases etc. The education has two objectives. The doctoral student shall develop a deeper understanding of biological science through knowledge of plant pathology principles (processes that lead to plant diseases). The doctoral student shall also understand how the application of plant pathology principles can lead to reduced losses caused by plant diseases. The purpose is to meet the qualitative targets for third-cycle studies specified in the Higher Education Ordinance, Annex 2 – Qualifications ordinance.

2. Entry requirements

Those admitted shall meet the following specific entry requirements.

The specific entry requirements are normally knowledge corresponding to at least 120 credits in biological subjects, of which at least 30 credits are in plant pathology or related subjects.

3. Scope and content of the programme

The programme contains two main elements: research and coursework.

Research

While studying, the student shall conduct independent research which is presented in a doctoral thesis normally corresponding to 180–195 credits. The thesis may be submitted as a compilation thesis or as a monograph. Compilation theses normally include at least 3 works. Several of these, including the monograph (where relevant), shall be of sufficient quality to be published in well-respected journals with referee systems. One of these should be accepted and/or published. The thesis should be written in English.

A licentiate degree required academic work corresponding to 90 – 95 credits, presented in a compilation thesis or monograph. At least two should be included in a compilation thesis. This work should meet the quality requirements for publication in a journal with a referee system. The thesis should be written in English.

Courses

The student is required to undertake coursework which corresponds to **45-60** credits for a Degree of Doctor, and **25-30** credits for a Degree of Licentiate. These studies shall include suitable general courses as well as individually selected subject courses. It is recommended that at least 15 credits consist of courses classified as plant pathology. The focus of the courses should be chosen with

consideration shown to the student's existing knowledge. Courses are chosen in consultation between the supervisor and student. Many subject-specific courses in plant pathology at SLU are organised as part of a Nordic collaboration through NOVA.

4. Miscellaneous

Further information about third-cycle studies is available in SFS 2006:1053, and information about grants can be found in SFS 1995:938 as amended by 1998:81 (reprint), 1998:161 and 2006:1053. Information about third-cycle studies at SLU is available in the Admission regulations for third-cycle (doctoral) education (reg. no SLU ua 41-1482/07) with the annex to the Board's decision of 26 April 2007, reg. no SLU ua 41-1482/07, the Vice-Chancellor's decision and the guidelines for doctoral education at the Faculty of Natural Resources and Agricultural Science (reg. no SLU ua 40-1244/08). Each department to which the third-cycle subject area is linked can choose to specify requirements in addition to those in this study plan. These requirements are to be specified in an annex.

5. Annexes

Annex 1 – Department of Crop Production Ecology, specific requirements

Annex 1

Specific requirements at the Department of Crop Production Ecology

In addition to carrying out the elements of specified above, the student should participate in and obtain experiences from other research and departmental activities. The student therefore should:

- Actively participate in the department's seminar and lecture activities.
- Be encouraged to apply for courses and seminars outside of their home department.
- Be encouraged to make international contacts.
- Write at least basic research grant applications.
- Actively participate in research activities such as work planning, work management, thesis supervision etc.
- Carry out certain teaching at first and second-cycle level.

Other compulsory elements in the doctoral studies

The progress of each doctoral project shall be followed up on annually, preferably in a seminar where the supervisory group is present. At these seminars, plans, ongoing work and completed work are presented. The seminars are organised at the department for researchers, doctoral students and other interested parties. The purpose is to discuss the student's plans and results in order for the wider thesis work to flow as well as possible. Achieved results are matched to the individual study plan and reported to the head of department via the director of studies. Continual reporting within the doctoral project in the form of written situation reports from the student to the supervisory group are recommended if regular contact with all members of the group is not possible. Completed elements that give credits shall continually be reported by the main supervisor to the director of studies for doctoral studies in order to be registered in the student registry (Ladok). The doctoral student is responsible for documenting seminars and other course-related teaching. The supervisor is ultimately responsible for the register information and the reporting thereof, and for ensuring that the student meets the requirements of the degree.

Mid-way review at the Department of Crop Production Ecology (VPE)

All students admitted to doctoral studies and registered at the Department of Crop Production Ecology shall carry out a half-time review. This evaluation shall be done at the point when the effective work hours correspond to two years of full-time studies (24 months) in the doctoral education. The date can be postponed due to a lower degree of activity or possibly for other reasons.

How is this done?

The half-time review consists of a public seminar at the Department of Crop Production Ecology and is part of the department's joint seminar series that is planned at the start of each semester. The seminar shall be advertised internally at the department and on the website at least two weeks before the date. The responsibility for the advertisement and for summoning the evaluation group is on the main supervisor, in consultation with the director of studies.

Implementation

At the half-time review, the following persons shall be present in the evaluation group:

- The supervisory group (the main supervisor and assistant supervisors).
- Department director of studies for doctoral programmes
- The subject co-ordinator (recommended) or other researcher with a PhD in the relevant field at the Department of Crop Production Ecology.
- One or several external evaluators, (of which at least one is a researcher who has defended their thesis and who is not part of the student's working group) of which one should be from outside of the department.
- A doctoral student at the Department of Crop Production Ecology, but outside of the evaluated project.

A proposal for a revised study plan shall be available at the mid-way review and is ultimately revised after the meeting according to proposals made at the meeting. Existing and relevant written materials such as manuscripts, drafts and test plans, as well as a preliminary completed evaluation form, shall be received by the evaluation group at least one week before the seminar. An English language summary of the seminar (maximum of one A4 page) shall be distributed within the department at least one week in advance. The seminar should not take longer than an hour. A summary of activities carried out so far shall be included, as well as opportunities for questions and discussion.

After the seminar, the Crop Production Ecology evaluation group convenes in the doctoral student's presence to discuss the seminar and the doctoral studies in general. The department's director of studies for doctoral programmes should chair the meeting. At the review, the scientific work and presentation shall be assessed, as well as the conditions for the continued work progressing well and ending in a public defence of the thesis within the time given. Both the doctoral student and supervisory group will be given opportunity to comment, without the other party present, on past and future cooperation in the doctoral studies. Minutes are kept during the meeting by an appointed person and are then sent for review and comments to all of the meeting's participants. A form designed by the faculty's directors of studies is used for the half-time review. The form shall be finalised by being filled out and signed by the head of department, main supervisor and doctoral student shortly after this meeting. The director of studies is responsible for ensuring that this is done. The signed original copy of the mid-way review is kept by the director of studies. The half-time review shall be registered in Ladok by the responsible department secretary and information about the outcome shall also be

submitted to the doctoral education council at the Department of Crop Production Ecology.

At 75 % of the study period

The doctoral student shall hold a "Final seminar" when 75 % of the net study period has passed. Here, the doctoral student presents their results so far and their plans for the thesis, in around 40 minutes, followed by a discussion. The supervisory group and doctoral studies coordinator(s) shall be present at the seminar. After the meeting, they discuss the time schedule up to the defence of the thesis with the doctoral student.

Individual study plan

The individual study plan shall be revised annually in consultation between the doctoral student and supervisor. The follow-up is done in consultation between the doctoral studies coordinator and the student. The plan shall state if the goal of the studies is a licentiate or doctoral degree.

Examination

Defence of a doctoral thesis

A "Count-down time table for PhD" shall be read well ahead of the public defence of the thesis. The doctoral student and supervisor review what needs to be done in the final six months leading up to the defence of the thesis.