

## **Background information to supervisors of degree projects, Master of Science Programmes in Biology and Applied Biotechnology, Uppsala University**

Thank you for accepting one of our students to do a degree project under your supervision!

This guide provides a short overview and help to those who will receive master students in Biology or Applied Biotechnology for a degree project. The complete, comprehensive course information is available via the course web pages: [www.ibg.uu.se/student-en/programme-pages/master/master-programme-biology/degree-project/](http://www.ibg.uu.se/student-en/programme-pages/master/master-programme-biology/degree-project/) and [www.ibg.uu.se/student-en/programme-pages/master/master-programme-applied-biotechnology/degree-project/](http://www.ibg.uu.se/student-en/programme-pages/master/master-programme-applied-biotechnology/degree-project/).

Contact information to coordinators handling degree projects in biology is also available via the course web pages.

At Uppsala University master students conclude their two-year education by doing a degree project of 30, 45, or 60 hp (20, 30 respectively 40 weeks of fulltime work). The purpose is to give the student training, under supervision, in the scientific process and research procedures: planning, performing, critically evaluating and reporting research. The longer (60 hp) degree project also includes training in writing a more comprehensive research plan. Students at bachelor level do degree projects of 15 hp.

The student should be assigned a problem that he or she is expected to work on under guidance, but as independently as possible. The problem should be defined such that it is possible to reach some results and conclusions as well as write a report, within the time available. We need a project plan of c. two pages in good time (at least a couple of weeks) before the student starts the degree project. This plan should be jointly discussed and written by the supervisor and the student (although the supervisor is main responsible at this stage). The plan describes the background, the scientific question and the kinds of methods to be used, and provides an outline of the expected outcome of the study. It should also have a tentative time plan. Please feel free to contact the student's coordinators at Uppsala University concerning this project plan.

For the 60 hp degree project, a more detailed research plan is written after the student has started and should be completed within the first two to three weeks. This plan corresponds to 5 of the totally 60 hp.

Projects performed abroad should be regulated by an agreement between Uppsala University and the receiving institution. This is needed to assure that the student is covered by their Swedish insurance during the stay abroad.

Some projects performed in cooperation with third parties, i.e. private companies, might need an agreement between the parties, including matters such as ownership of results and confidentiality. More information and templates for agreements are available here: <https://mp.uu.se/en/web/info/undervisa/juridik/samarbetsavtal>.

While working at your department the student should take part in departmental activities, such as seminars, to the same extent as students in your department normally do.

The student will be contacted by his/her coordinator for delivery of expected reports. About half-way through the project we want the master students with 30, 45 or 60 hp projects to report on the progress of the work. The midterm reporting may entail a short oral presentation and/or a short written report. The coordinator will give the student instructions for this procedure. For the 60 hp degree project, the 5 hp project plan must be finished and

reported in Ladok before the midterm presentation is accepted. Thesis projects of 15 hp do not include midterm reporting.

The final report of the thesis work should be written in English or Swedish as a scientific report in your field but also taking into consideration the particular guidelines that the student receives from his/her coordinator. The student also writes a one-page popular scientific summary of his/her work in Swedish (or in English if the student is not proficient in Swedish), and presents his/her work orally at a presentation arranged by the coordinator. The student must have passed the midterm presentation before doing the final presentation. The students act as opponents for each other and each master student in addition has an external opponent. Senior Ph.D. students and postdocs are appropriate for this task. The opponents review the written report and participate during the oral presentation, asking questions and commenting on the scientific content of the degree report. The oral presentation is normally public, but may be closed if the work is strictly confidential and/or contains material that is or will be included in a patent application.

The student has instructions for writing the report and when to hand it in, but suggestions, corrections and support from the supervisor concerning content and organisation of the thesis are needed and very valuable. As a supervisor you should also comment on language and structure of the report. It is valuable if you encourage the student to start writing early, and to set off sufficient time for writing at the end. Our experience tells us most students need to devote at least three weeks (preferably more) of full time writing at the end to produce a good report. Since the coordinators are not experts in the various fields that our students choose for their theses, you are kindly requested to approve the scientific content of the paper before the student hands it in to the coordinator.

Normally, the students hand in their reports via Urkund, an automated search engine that searches for similarities with other reports to detect possible plagiarisms. The report then becomes part of this database, but is not accessible from the outside. Unless there are specific reasons against it (see below), the report should be sent through Urkund, since unfortunately we see increasing plagiarism in students' reports.

*Special conditions: thesis projects with strict confidentiality and agreements with a third party: If you do not wish that the work is analysed this way, please notify the coordinator and student BEFORE the student is to hand in his/her report. The report may pass through Urkund in such a way that it is not uploaded to the Urkund data base. However, this means that the report cannot appear in plagiarism-related searches with other documents. Reports with strict confidentiality that are relevant to a patent application are not uploaded to Urkund at all. The student then should submit the report directly to the coordinator. In that case you have a special responsibility to ensure originality of the text.*

The popular scientific summary is published at the university web site. The full reports (except those related to patent applications) are filed under the DiVA digital archive. There are four alternatives for how to file the report:

1. "Make freely available now (open access)" means that the report will be published and filed directly.
2. "Make freely available later" means that the report is filed directly but that it will only be published after a certain date. Name, title, type of report, number of points and type of publication will be visible as well as web link to the report, but which will become active only at that date.
3. "Only for archiving" means that the report is filed directly but that it will not be made publicly available. Name, title and type of report, number of points and type of publication are shown but there is no web link to the report.

Alternative 2 or 3 are suitable e.g. when the report or contents/data thereof will be published

elsewhere (e.g. in articles submitted to scientific journals).

*Special conditions, thesis projects with strict confidentiality and agreements with a third party: As an additional alternative, the student can leave a message in the box “Message to the DiVA administrator” that the report should be confidential along with the registration number of the confidentiality agreement. The report will then be uploaded along with the registration number. This makes the report completely hidden. Reports related to patent applications are not included in the archive, they are only filed on paper along with a digital disc copy.*

We encourage supervisors and students to publish the thesis project as soon and as much as possible, and make it visible to the general public and search engines via the DiVA publication database. However, if you wish to postpone the publication so that you can first publish or patent the data, please let us know at the latest when the student submits the final version of the report.

The thesis work is assessed as Failed or Passed. The coordinator only sees the final version of the thesis, and listens to the oral presentations; mid-term and final. Therefore, we need your assessment concerning the actual work as well. This kind of feedback can best be provided via the supervisor’s certificate form that is available via the course web page.

If you have any additional questions, please feel free to contact us!

We hope the project will be satisfying both to you and to the student!

Coordinators/examiners of Degree projects in Biology and Applied Biotechnology  
Biology Education Centre  
Uppsala University