

Individual courses in Project work

Supervisor instructions

This information applies to supervisors with students enrolled in

- Master programme in Biology (1BG366/367/368)
- Master programme in Bioinformatics (1MB820/822)

General information about the course can be found on the Biology Education department website <http://ibg.uu.se/education/courses-programmes/individual-courses/>. This is also where you will find the supervisor certificate.

Purpose of the course

The aim of the course/courses is to give insight into and basic knowledge about how project work is pursued. The student should get the opportunity to, under supervision, as far as possible independently plan, implement and present a delimited work in project format. During the course the student is expected to

- 1) delimit and plan for the intended project,
- 2) search for, evaluate and critically compile already available information in the field,
- 3) chose appropriate methods for the survey,
- 4) carry out the investigation as well as interpret and evaluate the obtained results,
- 5) in a relevant way, orally and in writing, present the obtained results.

If instead, the work you have to offer is mostly to see how research and development is organized and carried out in practice – both with respect to how knowledge and theory is built and experiments performed rather than the student carrying his/her own project, the courses in Research Training are more appropriate.

The application

The course can in principle be carried out any time of the year but application and registration need to be done during spring or fall term/semester times (or at least in close connection with them). The application can be downloaded from the webpage.

Fill out the application form together with the student. It is important that you become acquainted with the specific information for supervisors (this document), and preferably also the general information related to the course (see webpage). Note! Along with the application should be attached a plan for the proposed project. The plan is written by you and the student. The plan should contain a short theory background for the field, specifics about what the student intends to do

during the project as well as a time plan for the project; for instance as a graphical illustration in the form of a Gantt-scheme or similar.

When a complete and correctly filled out application with all supplements has been handed in the student is admitted to the course (provided of course that he/she is eligible). The coordinator will then register the student for the course and he/she may commence the Project work. *It is important that the student be registered before starting the project due to insurance reasons.*

Differences between the 10 hp-, 15 hp- 20- and 30 hp courses

For approval and passing of all courses, an active participation in the planning and follow-up of the project as well as an oral presentation at the workplace and a written report are required. The student input, scope and extent for all of the above items is of course influenced by where the training is done, the interests of student and supervisor, the subject and topic as well as the varying lengths of the courses. The more the student can contribute to all of these things the better, and the more he/she will learn! - not only about the field of study studying but also about general aspects on how project work is pursued. The report of the Project work should be:

- 10 hp: 5 - 8 pages (max 8 pages of text)
- 15 hp: 6 – 10 pages (max 10 pages of text)
- 20 hp: 8 - 15 pages (max 15 pages of text)
- 30 hp 10 - 20 pages (max 20 pages of text)

The theoretical foundation

You and the student agree on suitable literature. The literature could be for instance 5-10 scientific articles, book chapters or similar. The amount and scope of the material is of course influenced by for instance the topic, where the work is performed and by the length of the Project work. It is recommended that the student also take the opportunity to search and survey the literature his/her own, at least to some extent (the earlier in the project the better!). This may bring in external views on the project and provide valuable training on searching for information and critically evaluating it. Remind the student to take notes during the project, regarding both experiments and general things.

Presentation and follow ups

The student must present his/her project work in the form of a seminar at your workplace. The form for the seminar is jointly decided by you and the student.

The written report is very also important (see below).

The written report

Ensure the student starts writing well in time! Leads and good general instructions can be found in the IBG booklets "Presenting science" (http://www.ibg.uu.se/digitalAssets/515/a_515518-f_presenting-science-2016-en-webb.pdf) and "How to avoid plagiarism" (http://ibg.uu.se/digitalAssets/331/c_331420-l_1-k_ibg-antiplagiat-en.pdf).

The report should be written in English, or Swedish if you think that is acceptable. The report should be written following a generally accepted format for a scientific report within the field under study. Possible suitable subdivisions could be:

- § A title
- § Names of student and supervisor, their affiliations, where the work was performed and which course it was part of

- § Abstract
- § Introduction
- § Materials and Methods
- § Results
- § Discussion
- § Acknowledgements
- § References
- § Appendix
 - Popular science summary
 - Project evaluation

or similar. It is acceptable to have a joint Results and Discussion section if deemed more suitable. The title page should be the title page template obtained from the website.

While your main task is not to ensure good formatting, please remind the student of proper use of references and complete formatting of the reference list.

In addition to the scientific report, a popular scientific summary should be handed in along with the formal report. Around one page maximum is sufficient and it should be understood by a biology students who just started their Bachelor studies.

The student should also add a 1-2 page project evaluation as a sort of self-reflection.

Reporting

It is important that you fill in and send the supervisor certificate about when the various course items are approved and along with this gives detailed opinions about the student's performance. Send the certificate directly to the coordinator at Biology Education Centre (IBG), Uppsala University together with the approved report. Scanned copies by email are accepted.

Once the coordinator approves of the report, the student is considered having passed the course. The course as a whole is assessed with either of the two final judgements not passed or passed.