

Course analysis for BB200X "Degree Project in Biotechnology, Second Cycle, 30.0 credits", 2019

Background

This course was started in 2016 by Maria Humble, and it was run for a small number of students (five) during spring 2016. In late 2016 Peter Savolainen and Qi Zhou jointly took over the roles as course responsible and examiner. In 2017 and 2018 the number of students were 19 and 28, respectively, and in 2019 this number has increased to 46. The course now has four course responsables and examiners, Peter Savolainen, Qi Zhou, Yves Hsieh and Patrik Ståhl.

Course Analysis 2019

The course was run in 2019 for 46 students. For this round of course analysis the evaluation form was answered anonymously, which had not been the case during previous years.

Below is a summary of the course evaluation given to the students, showing all their answers and comments. At each section, after summarising the student comments (where applicable), we also give our own comments and conclusions under a red heading "**Our comments:**". Further, at the end of the course evaluation is a section headed "**Our final comments and conclusions, and further plans:**". These comments constitute our course analysis.

Course evaluation BB200X

The goal of this evaluation is to get information from you in order to improve the course in the future. Since the course is new, your opinion is especially important for us!

Please note that we want to hear your opinion primarily about the course format, not about the actual project and supervision. At the end of this form there is an open question where you can relate your opinions also about the project and supervision.

It is OK to skip questions if you can't/don't want to answer!

PLEASE NOTE: We have merged the course analyses for VT1, VT2 and HT1 to gain better statistical relevance. The original number of students for VT1 is 32, VT2 is 10 and HT1 is 4.

Our comments:

We have received 42 evaluation forms out of 46 students giving a response rate of 90%. We have improved the response rate from 33% in 2018, to this year 90% in 2019, by implementation of course evaluation right after oral presentation instead of Canvas to increase the rate of response.

We present below all the comments offered by the students in their course evaluations together with our comments.

1. To what extent do you think you have achieved the stated course goals?

Very large	Large	Fair	Small	Very small
<input type="checkbox"/> 20	<input type="checkbox"/> 17	<input type="checkbox"/> 4	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

*I tried my best.**I have had the opportunity to both perform lab work and be part of planning the project.**I think I achieved my goals.....**Maybe more in the end***Our comments:**

Most of students believed they had reached the course goals to a very large or large extent, 37/42 (88%). Thus, the course has been generally successful. The outcome correlates very well with the evaluations from the supervisors, which are very positive. We examiners also find the thesis in generally high quality this year.

2. How many working hours per week have you spent on the course and your project?

<35	35-37	38-42	43-45	>45
<input type="checkbox"/>	<input type="checkbox"/> 1	<input type="checkbox"/> 20	<input type="checkbox"/> 8	<input type="checkbox"/> 13

Comments:

*I was at the lab a minimum of 8 h every day.**I have spent numerous hours on this project...***Our comments:**

All students have spent more than 40 h per week except for one who spent 35-37 h. This is also reflected by the excellent outcome of the final master thesis reports of the students.

3. To what extent do you feel that you understood how the course was organized and what you were expected to do.

Very large	Large	Fair	Small	Very small
<input type="checkbox"/> 14	<input type="checkbox"/> 20	<input type="checkbox"/> 7	<input type="checkbox"/>	<input type="checkbox"/> 1

Comments:

Well communicated.

Good course pm :)

It was sometimes too difficult to separate the requirements from KTH and from the external site

Informative course PM + supplement

Our comments:

Out of 42 students, 34/42 (81%) think that they understood the course information to a large/very large degree, and 7/42 (17%) only to a "fair-very small" degree. This is better than previous year 2018. However, there is still further work to do. We can make some links in the course PM to those extended information in the course PM supplement so that the information won't look scattered. One student also mentions a problem with prioritizing requirements from KTH and external supervisors. We will clarify the roles of the respective supervisors further during next year's start-up meeting, and explain that this should be communicated to the examiners as soon as possible if any problems arise.

4. What do you think about the general format of the course, with start-up meeting, half time meeting and oral presentation/opposition? Was this a good format? Could it have been performed in a better way?

Comments:

It was a good format.

I think it was good to have a structure like that.

Yes, it was a good format. However, I would have liked more information on how to write the opposition report.

I think it was good to have a structure like that.

Yes, it was a good format. However, I would have liked more information on how to write the opposition report.

Yes, I think it was a good format.

I really liked the structure. Sometimes it was a bit much to do besides the research, but overall it was good. It would be nice to provide also some draft how things can be structured and presented to learn more about common research ways.

Good!

I liked it! But all the reports took too much time – the last one was not meanty.

It was good. The meetings were nice (especially the half time meeting concerning the progress of the project). However, more time for the opposition report would have been nice.

I liked it, it helped with keeping us on track with the project.

Good info sessions! Although the written info was unclear, complementary PM etc.

More information, maybe shared the course page earlier

I like the format. However I think there could have been more days between the submission deadline report and the oral presentation – ie I wanted more time to prepare a good presentation.

I think it was a very good format with a lot of help and attention from the examiner.

I think it was good format but I think the last week was a bit too fully scheduled with the opposition report and the presentation.

I think the format, but thought that there was too much work focused on the project plans.

Good and useful for us students.

It was a bit extensive.

It was a good format.

Maybe discuss with other students at half time to share ideas.

Yes. I think that is a good way to improve skills in presentation.

I think it was very helpful.

I would like to have like a seminar session with the students from my group throughout the course.

It was good and helped in going in right direction.

It was good. I liked the presentation. Hoped to meet more often with main supervisors though.

Clear information about what will happen before every event.

OK, no complaints.

Better communication between main supervisor and examiner to see if the job is actually executed.

Very good format, nicely structured

The timeline of extension should be available

I think it is a very good format.

Yes it was good. It made the deadlines clear in the beginning

I would have liked more meetings with the examiner, but also study groups with other students would have been nice

Yes I thought this format of the course was good, but I would have preferred giving a presentation rather than a report during half-time.

Very good

Good

Yes, I like it!! Examiners are very helpful and they help us a lot.

Good format.

Good.

Nice format.

The meetings and setup was great.

The format was good, even if it was made in 50%.

Good. Since it is a long course, it is helpful that it's highly structured & that there are..

It was a good format.

Summary

Pros:

- Clear information.
- Helpful examiners.
- Good format.
- Progress meetings were nice, including halftime meeting.
- Good and helpful in going the right direction

Cons:

- One wanted more information for how to write opposition report.
- One student mentioned they wanted better communication with main supervisor and examiner.

Our comments:

We are very happy that essentially all 42 students liked the course format. The students mentioned the above Pros and Cons regarding the format of the course. We will keep the course format. The student performance on project plan is improving since most students have taken the project management course. The increased time for opposition report from the previous year seems to have had effect since we did not get any complaints about it this year. We did not get any complaints about the timing of the start-up meeting this year. Indeed, we should have information meeting in September/October. We are now having it in May. Regarding the issue with communication between KTH main supervisor and external supervisor, we will clarify the roles of the respective supervisors further during next year's start-up meeting, and explain that this should be communicated to the examiners as soon as possible if any problems arise.

5. Do you have any comments about the project plan?

Comments:

Especially the Gantt-chart helped me plan my project

No, perhaps a bit extensive but it was alright.

Nice

The first part was a bit early, did not have time to really start with the project before it was the deadline.

Great, it was valuable tool for my project, helped a lot.

I don't like project plans.

No, I think it was useful.

It was a bit too extensive, especially most of the students did not take a project management course.

Too much.

More time to make it, too close to the start where you just get introduced more.

Its good to plan things, but things never goes like the plan.

It was helpful, changing it at half-time helped in achieving something conclusive.

I think it helped. But some parts felt unnecessary.

It is great that we prepared it.

I think it could be a little bit problem for international students who have not project management course to do risk analysis.

Was a bit short time to do the first project plan version, 1 more week would be good.

Maybe too omfattande project plan requirements, it took a lot of time to write.

Perhaps a bit unnecessarily largely extensive do we really need a SWOT/RISK analysis

No

No

No

I think having it was not very rewarding, since it took a long time to write (takes time from project) However, I still think it is valuable for some people

No

I think it's a good way to get acquainted with the project and background early on.

Some parts are not necessary such as the MOSCOW analyses.

Good to have a plan to follow

No

Some parts not necessary (MOSCOW)

I don't see the project plan providing too much benefit. Maybe prepare literature review instead ...?

Good that it was divided into 2 parts.

Helpful for project-based work.

Summary

Pros:

- Valuable tool for my project**
- Helpful for project based work**
- Good to get acquainted with the project**

Cons:

- Too early
- Some parts not necessary, MOSCOW, SWOT/RISK
- Not too much benefit
- Too extensive

Our comments:

Most students consider the project plan as a valuable tool, however they find it to be too extensive. They also found the time constraints to hand in the first version was too short.

To improve for next year's students, we will extend the time for the first version of the project plan to be handed in by 1 more week. We would like to keep the extent of the project plan intact, the main reason being that the students are expected to learn the tools of project and time management as a part of the course, as stated in the Intended learning Outcomes (ILOs) of the course.

6. What were the strengths of the course?

Comments:

You learnt a lot.

The difficult aspects of planning research and presentation.

Many project management tasks, good for future work.

Good supervision, force to do good research of literature from the start.

Nice overall structure and time plan.

To be working in a real lab with real projects.

Great support from examiner and main supervisor. Very helpful

It was really fun, and stimulating.

The organization. All parts served a purpose.

Structure, guidelines and half-time seminar.

Well defined and lots to learn.

Helpful examiner, sufficiently detailed information and resources available.

External examiner.

That you get the opportunity to work independently.

Gave us opportunity to do a practical project, which is pretty good to gain the experiences on scientific study.

Project plans.

Regular meetings.

Really work on a project feels good.

The opportunity to be presented to different fields.

Learned so much more by doing things by myself

Structure, how the opposition was structured, that dates were set beforehand (of presentation, etc)

That a master thesis can lead to work, fulltime

Using project management tools and building upon the plan arranged. It gave guidance throughout the whole 6 months.

To be able to work on your own and clear deadline

I got to learn a lot!

Independent work and learnings throughout.

Independent work

Organization

It is very well organised and we got a lot of support from the examiners.

Let students be opponents is a good way to learn from each other

That the range of subjects to choose from is wide.

Very thorough, good milestones.

Many follow up meetings.

Structured

Summary

Pros:

-Good supervision

-Very helpful examiners and main supervisors

-Well organized, structure, time plan

Our comments:

We are very happy that our hard work as examiners were really appreciated by the students. We also see that the students appreciate their supervisors. They liked the course format with clear deadlines.

7. What were the weaknesses of the course?

Comments:

The duration of the course was rather short, I would have liked to work longer on the project.

I lacked some supervision.

Too little time

I think there could have been some more instructions for the final report.

The written info.

I would want to have more information about the course earlier.

The time limit. Two semesters would have been more suitable time range. It's difficult to achieve a lot in only one semester.

4.5 month is a really short time for a Master thesis project! Project plans too extensive.

Much dependency on the projects.

Time.

The time is a bit limited.

Time constraints led to reducing actual aim.

Time!

Maybe it is my own problem, but I think it could be challenging to 5 months to work on a project which is in nearly new area.

Maybe too omfattande project plan requirements, it took a lot of time to write.

Access to information, it was a bit hard to find information and knowledge of the objectives

Access to information, it was a bit hard to find information and knowledge of the objectives

No big weaknesses

Not being able to extend the time of the course due to problems occurring (not-controllable) by the student

Limit of time period, too short in 6 months.

I personally didn't like the project plan, since it took a long time

I felt that I lacked support from my supervisor regarding the project that I was performing, and that I didn't have anyone to discuss with

Maybe get report improvement comments from the opposition before the final submission.

Some parts of the project plan.

The time set for experiments could be longer

Project plan

Too little time for thesis writing.

Summary

Cons:

-Too limited time

-Too little time for thesis writing

-Time for experiment could be longer

-Fee of lack of support from my supervisor and had no one to discuss with

-Lacked some supervision

Our comments:

The thesis is conducted as a course which is defined by time constraints equal to 30hp. Some students mention lack of time for certain tasks such as thesis writing and experiments, however this also has to be considered in the context of project and time management. We should clarify at the start-up and halftime meetings that the course is limited in time and requires active time management from the students and supervisors. Some students mentioned lack of supervision, we address this issue further in question 10 below.

8. Do you have any suggestions for how to improve the course?

Comments:

Have an example on how to write the opposition report and presentation.

The opposition should have a word max. of 1000 instead of 2000

No, it was a good course format.

Arose Draft how to conduct the difficult aspects (thesis and presentation)

Have more contract between supervisor & student.

In report work, less time restrictions.

The deadlines should have been more spread out at the end of the semester.

More check up on projects.

Have a first version of report sent to examiner at half time.
It would be better if we can choose a project earlier.
Seminar sessions throughout the course.
It's a bit inconvenient to communicate when you have two supervisors.
Minimize the focus on the project plan; more focus on work
Make sure the projects are equally
Opponent report - writing a summary of the report felt a bit redundant (especially when already having an abstract)
Don't have a deadline which can't be extended
Can't think of any.
I don't know to be honest
More time for discussing your subject with your examiner and fellow students
Have better and clear instructions about the report content and the presentation.

I think it is a bit too short. There could be a bit more of flexibility regarding the length of the project.

No.

Set longer time for experimental part, could be better.

See earlier.

More detailed explanations on how to perform the opposition.

Summary

Suggestions:

- Longer course
- Flexible finish date
- Shorter opposition report, redundant
- More peer discussions throughout the course
- Better info regarding report writing

Our comments:

The course is limited to 20 weeks or 30hp which make time constraints necessary and these cannot be changed in the current format. The opposition report is a vital part of the students training in critical thinking and writing and cannot be too short to fully encompass these goals. The instruction for opposition report is clearly stated in the course PM an PM supplement. In addition, we will give more extensive examples for opposition report during the startup meeting and online. Instructions for thesis writing and presentation will also be summarized during the startup meetings. Peer meetings throughout the course is something we can propose during the startup meeting but this will not be coordinated by the examiners.

9. How was the overall quality of the course?

Very good	Good	Acceptable	Fairly poor	Poor
<input type="checkbox"/> 22	<input type="checkbox"/> 17	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

20 weeks is too little.

Learned a lot

More support, not only from the supervisor, was needed

Our comments:

We got 22 very good and 17 good.

We will continue to stress the role of the examiners, KTH main supervisors, and external supervisors during the startup and halftime meetings and that the students should contact examiners immediately regarding problems, such as communication with their supervisors.

10. Other comments, regarding your project and supervision?

It was nice!

Would have needed more help from the supervisors, or support in order to stay on track more. I always came up with something to do in order to proceed but it wasn't in the right direction at all times. With some tips, I could have been more effective.

Grate KTH supervision!

Super happy about the supervision. All questions I had were quickly answered.

It was good.

It was great! Only one comment: I would like to have another opportunity to revisit the report after the peer review.

I'm satisfied with the project and the supervision.

I am happy with my project and the supervision I've received.

They are really nice and kind people, thank them!

I felt I was stuck during a great part of my project and would have enjoyed some discussion to help me move forward.

Everything worked out fine!

Make sure the main supervisor (if you have an external supervisor) does the job it is handed

Good course structure!

Nothing I can think of

I felt that my supervisor did not enjoy being a supervisor for me, thus the relationship felt very strained, and sometimes it felt that I didn't get the help that I needed

Good supervision and I did learn a lot from the project valuable for future work.

Very involved – helpful.

Very nice project and supervision.

Summary

Pros:

-Satisfied with the project and supervision

-Good structure

-Happy about supervision

Cons:

-Want to update report after peer review

-Felt stuck during part of the project

-Supervisors job should be followed up on

-Didn't get the help that I needed from my supervisor

Our comment:

Students in general are happy with their projects and supervisions. On three occasions we get comments that students are not happy with their supervision. We note that this has increased from last year, we believe an explanation can be that the course evaluations this year were anonymous. We will continue to stress during the startup and halftime meetings the role of the examiners and that the students should contact us immediately regarding problems, such as communication with their supervisor. In particular for students with one KTH main supervisor and one external supervisor, it is important that the KTH main supervisor knows that their responsibility and role is to make sure that the student is in a functioning environment at the external site.

Thanks a lot for your help!

Our final comments and conclusions, and further plans:

Almost all students are generally very positive regarding both the course layout and execution, and their projects and supervision. The supervisors and we as examiners are also generally very pleased with the students' achievements. Thus, the course has been very successful.

We are very happy with the response rate of the course evaluations this year and have received 42 evaluation forms out of 46 students giving a response rate of 90%.

We will continue to make minor changes to further improve the information given to students before and during the course. This will include more detailed information during the startup meeting on opposition report, thesis writing and presentation work, as requested by the students.

We will continue to stress during the startup and halftime meetings the role of the examiners and that the students should contact us immediately regarding problems, such as communication with their supervisor. In particular for students with one KTH main supervisor and one external supervisor, it is also important that the KTH main supervisors know that their responsibility and role is to make sure that the student is in a functioning environment at the external site. The KTH main supervisor should be updated with the project plan and progress regularly.

Many students find the limited time during the thesis work problematic, and we will continue to stress the need for active time management, since the format of the course requires a fixed 20 weeks, 30hp of work. We will also continue to explain that project and time management, including formulating a project plan, are explicit parts of the course's ILOs.

For next year's course evaluation, we will also consider reformulating some questions to allow us to further analyse different parts of the course in more detail.