Course analysis BB1070 Genetik (6.0 hp), 2022

Background

The course was held remotely because of the COVID-19 pandemic. Last year (when the course was also held remotely), I recorded the lectures in advance, so that the students could see the videos, and I reused these videos this year. At the times scheduled for lectures I instead had "query sessions" via zoom. The literature seminars were done in groups of 4-5 as usual, but via zoom. The exam was a normal written exam, but the students had the opportunity to do an oral exam instead, which two students did.

Notably, also previous (pre-covid) years, the lectures (in class room) have included query sessions where the students could ask about unclear or complicated details. Therefore, the introduction of query sessions was not a major change of the course, the difference was that no lecture was held at the scheduled lecture times.

Furthermore, the course was originally designed to encourage self-studies, and to make it possible to study remotely without attending the lectures. Therefore, the transition to remote teaching has been relatively straightforward, and should not have severely affected the quality of the teaching.

Number of registered students:

69

Number of students writing the exam, at first (ordinary) exam.

50

Exam Results:

31 of 50 students (62%) passed the exam.
Number of students per grade: 4 A; 11 B; 5 C; 7 D; 4 E; 4 Fx; 15 F.

Summary of Course evaluations

To be found below, directly after the Course analysis.

Course analysis

The course analysis is based on a course evaluation given to the students at the exam. Out of the 50 students at the exam, 37 (74%) handed in the course

analysis. Thus, the **reply rate was 74%**, which is relatively high for a statistical survey, which should imply that the results reflect the students' opinion quite well.

What was good with the course?

At the zoom meetings with the students, comments about the course were generally very positive. They thought that the remote teaching worked quite well. The filmed lectures were appreciated. The students generally also appreciated (some were really enthusiastic) the literature seminars. On my question, the students generally thought that the study situation under the pandemic was OK, but that studying from home was more boring, they missed meeting people at school. Some thought they might be studying more because of less social diversions (fun stuff).

The students generally rate the overall quality of the course very highly, according to the Course evaluation handed out to the students. On the question "**How was the overall quality of the course**?" with the alternatives "Very good/Good/Acceptable/Not good/Bad", the students answered with the following frequencies: **16/16/5/0/0**.

Thus, 16 of the 37 students answering the course evaluation, **43%, answered "Very good"**, implying that 43% of the students seem in principle totally satisfied with the quality of the course!

Five students (14%) did not rate the course as "Very good" or "Good", instead rating it as "Acceptable".

On a scale 1-5, setting "Bad" to 1 and "Very good" to 5, the **mean rating** is **4.30**.

Thus, I conclude that the students are generally pleased with the course. It is notable that many students think that this course has a relatively heavy workload, but still think it is good!

In addition to my own questions, the course evaluation also included questions from the KTH Learning Experience Questionaire (LEQ). Also the LEQ indicated a generally very successful course and satisfied students.

The scale for answers is 1-7 (1 = No, I strongly disagree; 4 = I neither agree nor disagree; 7 = Yes, I strongly agree).

For the three questions I think are the most important parameters, the answers from the students were very reassuring:

Question: "**The atmosphere in the course was open and inclusive**": Mean value **6.60**

Question: "**I understood how the course was organized and what I was expected to do**": Mean value **6.61**

Question: **"The course activities helped me to reach the learning objectives efficiently"**: Mean value **6.12**

Thus, quite high values for these questions.

I am especially happy that the question **"The atmosphere in the course was open and inclusive"** got the high **mean value 6.60**. It is a major goal for me that the students feel well treated and have a good time in the course, since I think this is a very effective tool for the learning. I also think that it is important for any leader of a group of people to make sure that the group members are comfortable and feel well treated. The high score on this question indicates that I have created a good learning climate.

Furthermore, based on the high values on the two other questions: **"I understood how the course was organized and what I was expected to do"**: mean value **6.61**, and **"The course activities helped me to reach the learning objectives efficiently"** mean value **6.12,** I draw the conclusion that my pedagogics, my deep learning design and my alignment of course activities and exam seems to work well!

Also the question **"I could get support if I needed it"** got a relatively high value, **6.59**. I actively try to make sure the students get the help and support they need: The students are encouraged to send emails with questions about things they need explained. These questions are then discussed at the next query session. I make sure to be available both before and after the query sessions (and pre-covid, the lectures) for questions. I am therefore happy to see that the students seem to be pleased with the amount of support they get from me and from also from other students.

To summarize, according to my own course evaluation and the KTH LEQ, the students are generally very satisfied with the course.

What was bad with the course?

Only 31 of the 50 students (62%) passed the exam. The number of students per grade was: 4 A; 11 B; 5 C; 7 D; 4 E; 4 Fx; 15 F.

This is the worst result ever for this course. It is notable that there was a distinct bimodal distribution of the results, with 15 students having A or B, and 15 having F. Thus, there were approximately as many students with good grades as previous years. The difference this year is the large number of students with F, 15 instead of the usual 4-5.

In the course evaluation, several students write that they did not watch the lecture videos. In my information to the students, I emphasized the importance of reading the course literature, and it seems some students thought the

recorded lectures were redundant. Next year I will make sure to tell the students both to read and to watch the lectures.

According to the LEQ, the students estimated that the mean time they have spent on studies on the course was 130 h (6hp corresponds to 160 h). This is less than the 135-145 h estimated most of the previous years.

Thus, a reason for the relatively bad results on the exam may be that some students spent too little time on studies for the course. Possibly, this is related to the covid situation, with somewhat depressed students, and the situation may hopefully be better after the pandemic.

What changes will be made until next time the course is given?

Because the pandemic is probably over, next year's course will be very different, changing from remote to in-place teaching. Most probably, the course will be different also compared to pre-covid times. I have no definite plans yet, but consider keeping filmed lectures instead of live ones, and instead use the scheduled lectures for query sessions, in principle flipped classroom.

The filmed lectures may have a good effect on the learning, since the students can listen to the lectures in their own pace. The backside is that it gets a bit boring, without opportunity for spontaneous questions and discussions. The questions can be discussed at the query sessions, but some spontaneity will obviously be lost.

According to the students' answers to the course evaluation, they generally seem to think my plan for next year is good.

Otherwise, the course has worked well during all previous years, so there is no reason to make any other major changes. However, the course is generally under constant development, especially concerning choice of additional texts for the seminars, and therefore changes are normally done each year.

Here follows the Course evaluation questionnaire given to the students, with results and my comments written in read:

My comments:

> *37 students of the 50 doing the exam answered => **Frequency of reply = 74%,***
>
> *This is a relatively high answer frequency for a statistical survey, which should imply that the results reflect the students' opinion quite well!*

Course evaluation BB1070

The goal of this evaluation is to get information from you students, to enable improvements of contents and concept of the course. It is important help for me!

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

If more space is needed, please use the backside.

1. How was the overall quality of the course?

Very good	Good	Acceptable	Not good	Bad
☐ 16	☐ 16	☐ 5	☐ 0	☐ 0

My comments:

> *Mean value (on scale 5 – 1) is **4.30.***
>
> *The trend for the previous courses (BB2470 and BB2475) from 2010 to 2020: 4.21; 4.30; 4.32; 4.55; 4.23; 4.60; 4.32; 4.39; 4.16; 4.21; 4.36*
>
> *Thus, students are overall very satisfied each year.*
>
> *Notably, 16 of the 37 students, **43%,** answered **"Very good"**, implying that 44% of the students seem in principle totally satisfied with the quality of the course!*

Comments:

My comment: Exempel på positiva kommentarer:

"Very fun course and excellent design"

"Tydligt vad som behövde göras och krävdes"

"Overall very good. Although I'm not fond of reading course literature"

2. How was the course book?

Very good	Good	Acceptable	Not good	Bad
☐	☐	☐	☐	☐

Comments:

My comments:

> *Mean value (on scale 5 – 1) is **4.03.***
>
> *This is a very special book which is the core for my course, so I am happy the students find it OK, with its good and bad sides.*

My comment: *A few typical comments:*

"Great book. Nice that it was not a classic American paid per page book with infinite text..."

"Skönt att den var kortfattad, men lite väl kortfattad vid lite komplexare delar"

"There was a LOT of straight reading and memorizing, was hard even when highlighting and extra notes to retain the information"

3. "The additional texts"

(a) What did you think about the "additional texts"? Did it give you something extra, compared to just reading the course book? Was the amount of reading OK?

(b) What do you think about the method of examination of the texts? My goal is that you should be able to read "relaxed" by not having to study details. And enjoy the texts and become wiser human beings... Did this work? And were the discussions interesting? Or, would you have wanted another form of examination?

Comments:

My comment: A few typical comments:

"The additional texts were excellent! I found them easier to read than the course book, and the seminars fun!"

"Tyckte om extratexterna då det var där man lärde sig något nytt till skillnad boken var något mer av repetering från gymnasiet"

"Kul, annorlunda examination. Kändes väldigt givande och va inte stressigt inför"

4. Lectures and study questions

(a) The course has relatively few lectures, which do not cover everything in the course. How did this work? Would you have liked to have more lectures?

(b) On the other hand you had the study questions intended to partially replace lectures, did this work? What did you think about the study questions?

Comments:

My comment: A few typical comments:

"Skulle vilja ha fler föreläsningar som förklarar mer. De var bra att kolla på"

"The amount of lectures were fine and the study questions made it easier to know what was wanted"

5. Teaching during COVID-19

The course was on distance because of the Corona situation. Do you have comments about the design of the course (filmed lectures, query sessions etc.), did it work OK? Should it have been done another way? Did you use all parts of the course or just some?

Comments:

My comment: A few typical comments:

"Funkade utmärkt!"

"Jag gillar inspelade filmer enormt för mig är det väldigt mycket bättre att se den 2 gånger i dubbelhastighet istället för 1 normalt"

6. Teaching post COVID-19

Hopefully, there will be no COVID-19 restrictions in future. I am thinking about how to plan my course for future years. I am now leaning towards:

(i) Having he lectures on video, like this year

(ii) Instead of live lectures having live query sessions (like the ones we had on zoom)

(iii) Having live literature seminars

Does this seem like a good plan, or do you have other suggestions?

   Comments:

My comment*: A few typical comments:*

"Yes I agree with all 3 directions you want to take the course"

"Ha livelektioner/föreläsningar, men lät ändå studenterna få tillgång till de inspelade. Att ha live är mer motiverande, men de inspelade är bra om man missar eller vill repetera"

Please see also the **KTH Learning Experience Questionnaire (LEQ)** on next pages!

Thanks a lot for the help!

Course evaluation (LEQ) for BB2470 part 1, fall 2016

KTH Learning Experience Questionnaire (LEQ)

LEQ is a tool that examines your experience of the learning environment in a course. It consists of a number of statements and a few open questions. Please indicate to what extent you agree or disagree with a specific statement on a scale between 1 and 7, where

> *1* = No, I strongly **disagree**
>
> *4* = I **neither** agree nor disagree
>
> *7* = Yes, I strongly **agree**
>
> X = I'm unable to respond *or* I consider question irrelevant to the course

My comment: I have inserted the mean value of the answers from the students for each question, my conclusions about these results, and some comments from the students.

Estimated effort

On average, how many hours/week have you been working with the course (including scheduled hours)?

0-7h	8-12h	13-17h	18-22h	23-27h	28-32h	33h or more
☐	☐	☐	☐	☐	☐	☐

Mean value 14.4h

My comment: This mean value is lower than the last three years that had 15.0-16.3h. This may possibly explain the relatively bad results at the exam.

Learning experience

1. I worked with interesting issues

1	2	3	4	5	6	7	X
☐	☐	☐	☐	☐	☐	☐	☐

   Comments: Mean value 6.38

2. The atmosphere in the course was open and inclusive

1	2	3	4	5	6	7	X
☐	☐	☐	☐	☐	☐	☐	☐

Comments: Mean value 6.60

3. I understood how the course was organized and what I was expected to do

1	2	3	4	5	6	7	X
☐	☐	☐	☐	☐	☐	☐	☐

Comments: Mean value 6.61

4. I understood what the teachers were talking about

1	2	3	4	5	6	7	X
☐	☐	☐	☐	☐	☐	☐	☐

- Comments: Mean value 6.63

5. I could learn from concrete examples that I was able to relate to

1	2	3	4	5	6	7	X
☐	☐	☐	☐	☐	☐	☐	☐

Comments: Mean value 6.46

6. Understanding of key concepts was given high priority

1	2	3	4	5	6	7	X
☐	☐	☐	☐	☐	☐	☐	☐

Comments: Mean value 6.26

7. The course activities helped me to reach the learning objectives efficiently

1	2	3	4	5	6	7	X
☐	☐	☐	☐	☐	☐	☐	☐

Comments: Mean value 6.12

8. I could learn in a way that suited me

1	2	3	4	5	6	7	X
☐	☐	☐	☐	☐	☐	☐	☐

Comments: Mean value 5.40

9. I could learn by collaborating and discussing with others

1	2	3	4	5	6	7	X
☐	☐	☐	☐	☐	☐	☐	☐

Comments: Mean value 5.76

10. I could get support if I needed it

1	2	3	4	5	6	7	X
☐	☐	☐	☐	☐	☐	☐	☐

Comments: Mean value 6.59

My comments:

The overall results show that students are quite happy with the atmosphere and design of the course.

The values have generally increased by 0.35 the last three years. Thus, it seems there is a positive trend, which may reflect my adjustments of the course.

11. What was the best aspect(s) of the course?

A few comments:

"Man kunde organisera studierna själv och man fick tydliga instruktioner"
"Bra lärare"

12. What would you suggest to improve?

A few comments:

"Föreläsningar som täcker mer av materialet"
"Kursboken, den är gammal"

13. What advice would you like to give to future course participants?

A few comments:

"Börja tidigt"
"Please study in good time before the exam"
"Häng med från början så blir det aldrig särskilt jobbigt!!"

14. Is there anything else you would like to add?

A few comments:

"Thank you for a fun course!"

"Kul kurs, bra engagerad föreläsare!"

Thank you for taking the time to fill out this course evaluation!