

## **Course analysis BB1070 Genetik (6.0 hp), 2023**

### **Background**

This was the first year back to normal after the covid pandemic.

Inspired by the remote teaching during covid, I have kept the lectures on video, and instead used the scheduled lectures for query sessions where the students could ask about unclear or complicated details. However, also previous years, the lectures (in classroom) have included query sessions, so this was not a major change of the course, the difference being that no lecture at all was held at the scheduled lecture times, only the query sessions.

Importantly, 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 lectures on video has not been a big change of the course design.

### **Number of registered students:**

87

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

70

### **Exam Results:**

62 of 70 students (89%) passed the exam.

Number of students per grade: 19 A; 12 B; 16 C; 10 D; 5 E; 4 Fx; 4 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 70 students at the exam, 61 (87%) handed in the course analysis. Thus, the **reply rate was 87%**, which is high for a statistical survey, which should imply that the results reflect the students' opinion quite well.

### **What was good with the course?**

#### **High proportion of students passing the exam, and with good grades**

62 of 70 students (89%) passed the exam.

Number of students per grade: 19 A; 12 B; 16 C; 10 D; 5 E; 4 Fx; 4 F.

Notably, this is a great improvement since last year, which had the worst exam results ever for the course. Possibly this was an effect of depressed students during the second year of pandemic, and it is now nice to see really good results at the exam in the post covid era.

### **Students overall satisfied with the course**

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: **24/29/8/0/0**.

Thus, 24 of the 61 students, **39%**, answered "**Very good**", implying that 39% of the students seem in principle totally satisfied with the quality of the course!

On a scale 1-5, setting "Bad" to 1 and "Very good" to 5, the **mean rating** is **4.25**.

### **Time on studies increased**

Based on the answers in the KTH Learning Experience Questionnaire (LEQ), the number of hours the students worked with the course increased by a mean of 2.4 hours since last year. Possibly this is also a reason for the very good exam results.

### **KTH Learning Experience Questionnaire (LEQ) indicating good course design and open atmosphere**

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 **6.36**

Question: "**I understood how the course was organized and what I was expected to do**": Mean value **6.75**

Question: "**The course activities helped me to reach the learning objectives efficiently**": Mean value **6.10**

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 6.36**. 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 and 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.

Furthermore, based on the high values on the two questions: "**I understood how the course was organized and what I was expected to do**": mean value **6.75**, and "**The course activities helped me to reach the learning objectives**

**efficiently"** mean value **6.10**, I draw the conclusion that my pedagogics, my deep learning design and my alignment of course activities and exam seems to work well!

To summarize, the results of the exam and the course evaluation indicate that the course design is effective and that the students are generally very satisfied with the course. It is notable that many students think that this course has a relatively heavy workload, but still think it is good!

As in previous years, the students are generally very pleased (and some quite enthusiastic) about the reading of articles and discussion of these at seminars. I think that this part of the course is inspiring and broadens the students' knowledge of genetics, and thus a successful part of the course design.

### **What was bad with the course?**

Eight students (13%) did not rate the course as "Very good" or "Good", instead rating it as "Acceptable". In their comments, several of these students are not satisfied with the course design, because the course involves a lot of self-studies by reading the course literature. However, this is a central part of the course design, and therefore unavoidable given the course design.

Furthermore, while most students seem to have appreciated having the lectures on video, giving them good command over their studies, some students think this makes the course more dull.

Otherwise, the results of the course were generally good with good results at the exam and positive feedback from the students, as related above, and I don't see that anything was really bad with the course.

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

The course has been changed quite considerably the last three years, during the pandemic and the first year after the pandemic. The new design, with lectures on video and scheduled query sessions seems to work very well, considering the good results at the exam and the positive feedback from the students. I will therefore not do any major changes of the course this year.

Generally, the course is under constant development, especially concerning choice of additional texts for the seminars, and therefore small changes are normally done each year.

***Here follows the Course evaluation questionnaire given to the students, with results and my comments written in red.***

## 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!

### 1. How was the overall quality of the course?

Very good	Good	Acceptable	Not good	Bad
<input type="checkbox"/> 24	<input type="checkbox"/> 29	<input type="checkbox"/> 8	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

**24/29/8/0/0**

**On a scale 1-5, setting "Bad" to 1 and "Very good" to 5, the mean rating is 4.25.**

### 2. How was the course literature (except the additional texts, see below)?

Very good	Good	Acceptable	Not good	Bad
<input type="checkbox"/>				

Comments:

**On a scale 1-5, setting "Bad" to 1 and "Very good" to 5, the mean rating is 4.0.**

### 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 of the additional texts?

Comments:

#### 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:

#### 5. Teaching post COVID-19

As a result of the experience of teaching during the COVID-19 pandemic I had no live lectures, these were instead on video. And the scheduled lectures were instead used for live query sessions.

Was this a good arrangement, or would you have preferred live lectures? Or any other arrangement?

What did you think about the filmed lectures, and the query sessions?

Comments:

#### 6. How many (approximately) of the query sessions did you attend?

0      1-4      5-8      9-13

                

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

**Thanks a lot for the help!**

**Below are the results of the LEQ, values given in red.**

## Course evaluation (LEQ) for BB1070, 2020

### 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 am unable to respond *or* I consider question irrelevant to the course

### 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
<input type="checkbox"/>						

**Mean: 16.8 hours per week**

### Learning experience

1. I worked with interesting issues	1	2	3	4	5	6	7	X
	<input type="checkbox"/>							

Comments: **Mean 6.4**

2. The atmosphere in the course was open and inclusive	1	2	3	4	5	6	7	X
	<input type="checkbox"/>							

Comments: **Mean 6.4**

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

1	2	3	4	5	6	7	X
<input type="checkbox"/>							

Comments: **Mean 6.8**

4. I understood what the teachers were talking about

1	2	3	4	5	6	7	X
<input type="checkbox"/>							

Comments: **Mean 6.6**

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

1	2	3	4	5	6	7	X
<input type="checkbox"/>							

Comments: **Mean 6.3**

6. Understanding of key concepts was given high priority

1	2	3	4	5	6	7	X
<input type="checkbox"/>							

Comments: **Mean 6.2**

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

1	2	3	4	5	6	7	X
<input type="checkbox"/>							

Comments: **Mean 6.1**

8. I could learn in a way that suited me

1	2	3	4	5	6	7	X
<input type="checkbox"/>							

Comments: **Mean 6.2**

9. I could learn by collaborating and discussing with others

1	2	3	4	5	6	7	X
<input type="checkbox"/>							

Comments: **Mean 6.2**

10. I could get support if I needed it

1	2	3	4	5	6	7	X
<input type="checkbox"/>							

Comments: **Mean 6.5**

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

12. What would you suggest to improve?

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

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

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