

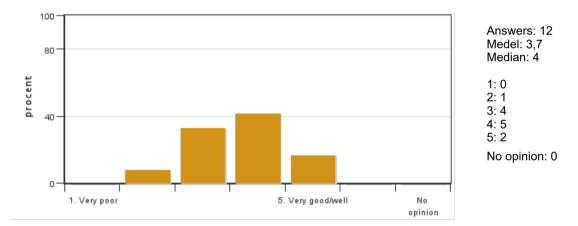
# Plant Biology for Breeding and Protection BI1296, 30258.2223

15 Hp Pace of study = 100% Education cycle = Advanced Course leader = Erik Alexandersson, Sajeevan Radha Sivarajan

## **Evaluation report**

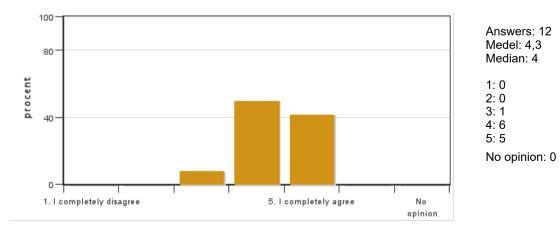
Evaluation period: 2023-03-14-2023-04-04Answers12-Number of students13Answer frequency92 %

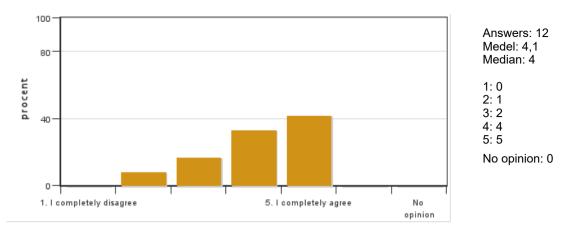
# Mandatory standard questions



#### 1. My overall impression of the course is:

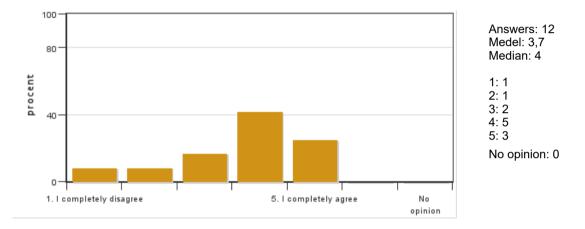
#### 2. I found the course content to have clear links to the learning objectives of the course.



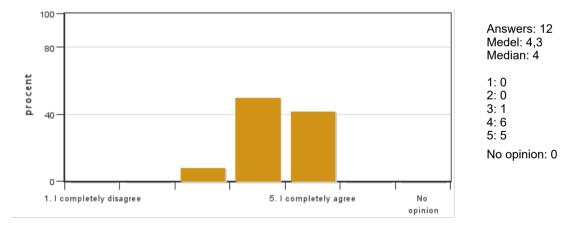


#### 3. My prior knowledge was sufficient for me to benefit from the course.

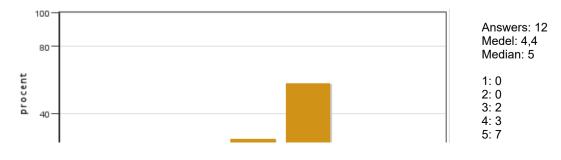
#### 4. The information about the course was easily accessible.



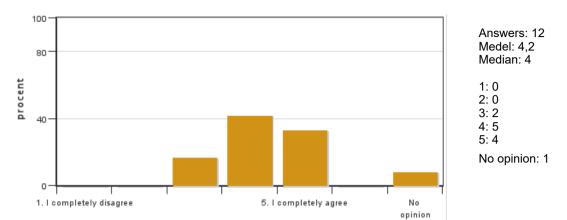
#### 5. The various course components (lectures, course literature, exercises etc.) have supported my learning.



#### 6. The social learning environment has been inclusive, respecting differences of opinion.

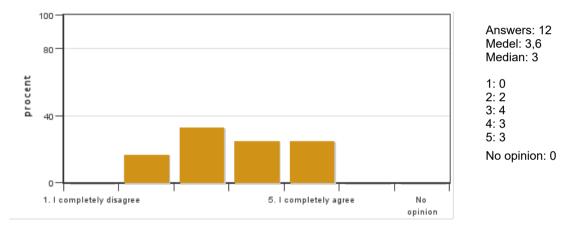




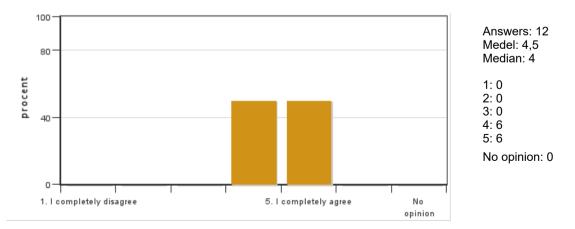


#### 7. The physical learning environment (facilities, equipment etc.) has been satisfactory.

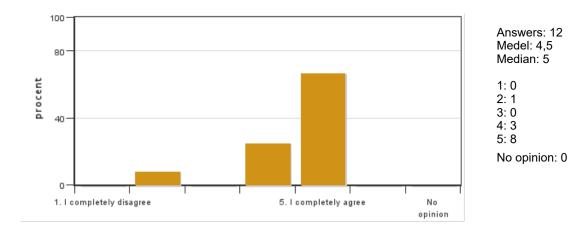
8. The examination(s) provided opportunity to demonstrate what I had learnt during the course (see the learning objectives).



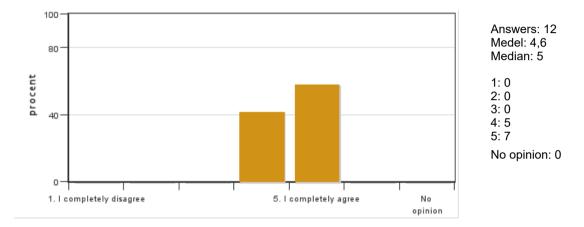
# 9. The course covered the sustainable development aspect (environmental, social and/or financial sustainability).



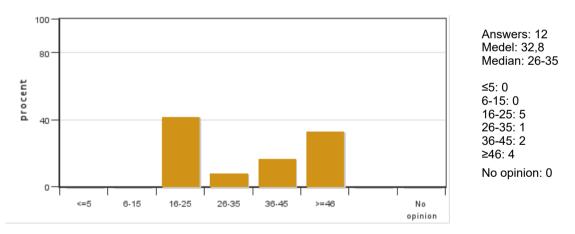
10. I believe the course has included a gender and equality aspect, regarding content as well as teaching practices (e.g. perspective on the subject, reading list, allocation of speaking time and the use of master suppression techniques).



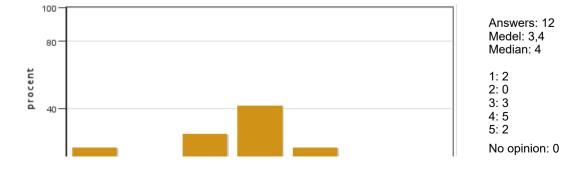
#### 11. The course covered international perspectives.



#### 12. On average, I have spent ... hours/week on the course (including timetabled hours).



#### 13. If relevant, what is your overall experience of participating in all or part of your course online?





#### 14. If relevant, please share what worked well when participating in teaching on distance

#### 15. If relevant, please share what worked less well when participating in teaching on distance

### **Course leaders comments**

There are quite mixed feelings about the course, which partly seems to be dependent on whether it was taken in Uppsala or Alnarp and background knowledge of the students. It is clear from the evaluation that the Bioinformatics and GWAS exercises as well as some other online exercises were challenging to the students, mainly due lack of previous knowledge and lack of feedback. We are therefore planning to add a couple of theoretical lectures and try to connect the different bioinformatics parts together in the upcoming course.

In general, there seems to be too many tasks at the end of the course and too few in the beginning. This criticism has come up before and we will continue to try to increase the lecture hours in the beginning of the course to free up more time at the end. For the SBL exercise it is, however, difficult to start earlier than after a couple of weeks since not enough background is covered. We will also re-evaluate the seminar series as several students express that they are already confident in reading and interpreting scientific papers. The students raised that three hours was too short for the exam and we will consider to increase it to four hours, apart from that the way to examine the course also seems satisfactory. The students are generally pleased about the international perspectives taken in the course.

#### Student representatives comments

There was 92% (12 out of 13) response rate for the course evaluation on Plant Biology for Breeding and Protection. More than 74% of the respondents indicated positive overall impression on the course. The lectures were easy to follow and information on the course was easily accessible with course literature provided on canvas. Most of the course was online (zoom) which worked pretty well with good connectivity and access to the zoom link. The course lectures were timely, inclusive, interactive and covered international perspectives with some lectures from South Africa and other parts of Europe. The course was broad that included plant breeding, phenotyping, plant pathology, bioinformatics and literature projects. All the students indicated they spent not less than 26 hours per week on the course whilst 50% spent more than 46 hours per week on the course.

In general, most of the students indicated some difficulties with the digital lab exercises since some of the tools used were either not working or server unresponsive. An example was the phenotyping exercise that did not work quite well as most students spent time trouble shooting instead of understanding the content of the lab exercise. The tool used for the bioinformatics exercise (galaxy) was too slow to respond and most of the students could not complete the exercise in due time for the report. We also felt that, the oral feedback sessions on the bioinformatics report were less satisfactory but prefer written feedback that can facilitate in completion of the lab exercises. The course schedule was well planned but later inclusion of 2CS group projects in addition to SBL projects increases workload for the course. The due date was also not timely to better organize the group reports for 2CS and make good understanding (forming) out of it as a group (teamwork). Most students also wish to receive feedback on the SBL group report before the exam since the SBL carries about 40% of the total grade.

Most students believe that the exams helped them to demonstrate their understanding on the course content, however, the duration for the exam was too short (3 hours) because there were too many questions which involved application of knowledge and explanation of concepts from the course and also calculation of fraction which needs time without the help of calculator.

The course leader (Erik) has been patient and was ready to listen to the concerns of the students during the course. We were generally happy with the additional in-person bioinformatics practical session organized which facilitated our understanding prior to course completion and exams.