

# Introduction to Plant Biology for Sustainable Production BI1294, 10302.2223

15 Hp Pace of study = 100% Education cycle = Advanced

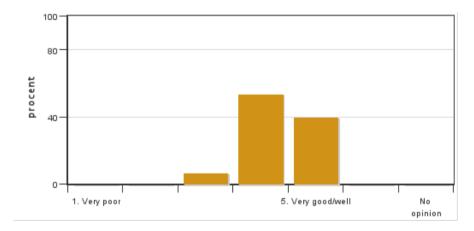
# **Evaluation report**

Evaluation period: 2022-10-24 - 2022-11-14

Answers 15 Number of students 18 Answer frequency 83 %

# **Mandatory standard questions**

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

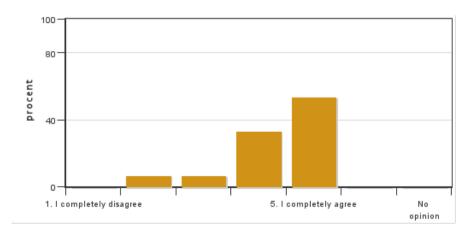


Answers: 15 Medel: 4,3 Median: 4

1: 0 2: 0 3: 1 4: 8 5: 6

No opinion: 0

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



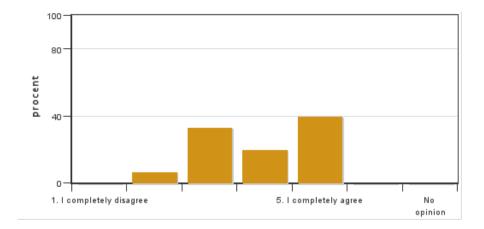
Answers: 15 Medel: 4,3 Median: 5

1: 0 2: 1

3: 1 4: 5 5: 8

No opinion: 0

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



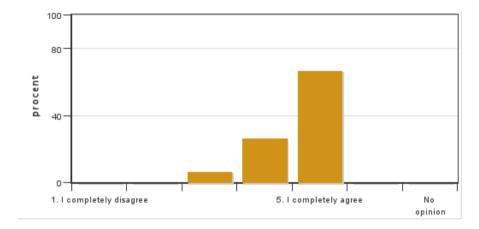
Answers: 15 Medel: 3,9 Median: 4

1:0 2: 1 3: 5

4: 3 5: 6

No opinion: 0

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



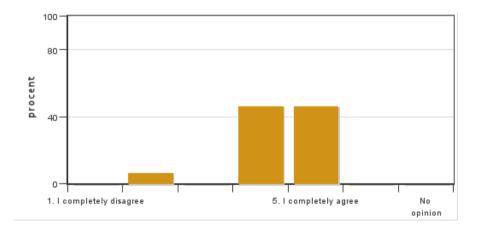
Answers: 15 Medel: 4,6 Median: 5

1:0 2: 0 3: 1

4: 4 5: 10

No opinion: 0

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

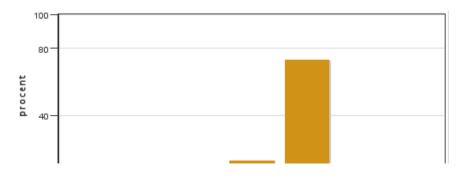


Answers: 15 Medel: 4,3 Median: 4

1:0 2: 1 3: 0 4: 7 5: 7

No opinion: 0

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



Answers: 15 Medel: 4,5

Median: 5

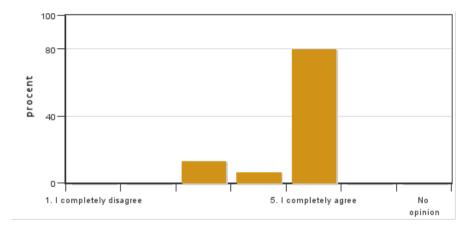
1:0 2: 1

3: 1

4: 2 5: 11

No opinion: 0

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



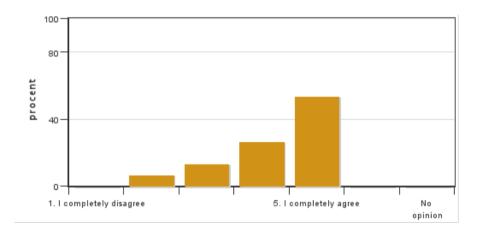
Answers: 15 Medel: 4,7 Median: 5

1: 0 2: 0 3: 2

4: 1 5: 12

No opinion: 0

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



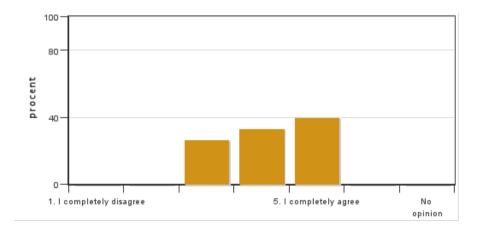
Answers: 15 Medel: 4,3 Median: 5

1: 0 2: 1 3: 2 4: 4

5:8

No opinion: 0

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



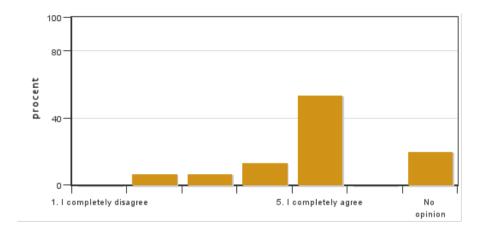
Answers: 15 Medel: 4,1 Median: 4

1: 0 2: 0 3: 4

4: 5 5: 6

No opinion: 0

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).



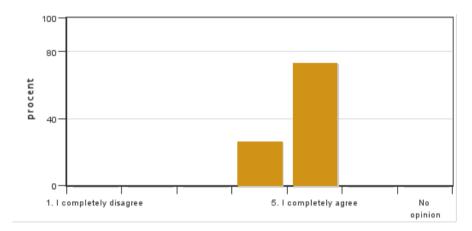
Answers: 15 Medel: 4,4 Median: 5

1: 0 2: 1

3: 1 4: 2 5: 8

No opinion: 3

### 11. The course covered international perspectives.



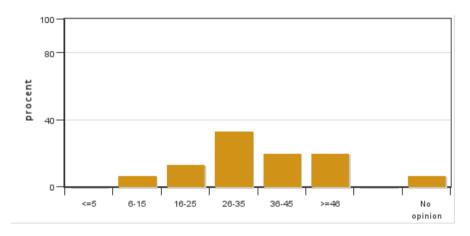
Answers: 15 Medel: 4,7 Median: 5

2: 0 3: 0 4· 4

4: 4 5: 11

No opinion: 0

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

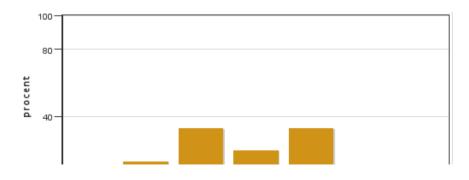


Answers: 15 Medel: 32,7 Median: 26-35

≤5: 0 6-15: 1 16-25: 2 26-35: 5 36-45: 3 ≥46: 3

No opinion: 1

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



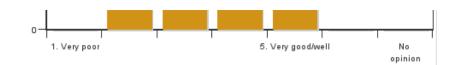
Answers: 15 Medel: 3,7

Median: 4 1: 0

2: 2 3: 5

4: 3 5: 5

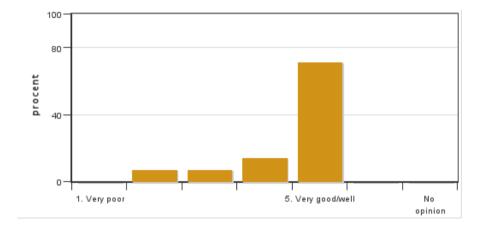
No opinion: 0



- 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

# Additional own questions

- 16. The course consists of several modules (course weeks) what is your opinion on the first and second weeks on plant anatomy and transcription and gene regulation ect.?
- 16. What is your opinion on the written assignments and the journal clubs
- 16. What is your opinion on the course lab practical?



Answers: 14 Medel: 4,5 Median: 5

1: 0 2: 1 3: 1 4: 2 5: 10

No opinion: 0

- 17. What is your opinion on the lectures on transcriptomics, metabolomics and proteomics?
- 17. What is your opinion on the lectures on ethics, science communication and genetic resources?
- 17. Do you have any comments on the fact that several lectures where distance lectures, i.e. that the lecturer was on a remote location?

# **Course leaders comments**

On this course, students participate from both the SLU campuses at Ultuna and Alnarp. A proportion of the lectures are also held together with a sister course at Umeå university

This comment is relevant for both of these course locations.

Overall the students seem to be happy with the course content and organization. We put an emphasis on methods to study plants, writing skills and how plant science contributes to sustainable development. Many students appreciate the Journal Cubs (JC) and their associated writing assignments. However, some students express concerns that the texts are too advanced or that not enough time is provided to complete all tasks associated with the assignments.

Next year we will try to make changes in the schedule to accommodate more time between the hand-in of texts for peer review, subsequent JC and the final dead-line for the assignment.

We introduced a digital lab practical during the pandemic that practices problem-based learning. Since this lab practical was appreciated by the previous students, we also kept it for the course this year. Some students expressed concerns that they did not get enough explanation on how to perform the tasks in the digital lab practical. Next year we will further clarify the concept of problem-based learning as this obviously was new for some of the students in this year's course.

The distance-learning poses some challenges because, at all times, some students are not in the same room as the lecturer. SLU have three rooms specially dedicated to distance learning- The rooms are equipped with extra cameras, microphones and monitors that facilitate interactions across campuses. Due to the heavy booking, the course was for many lecturers only booked in the distance learning room in Alnarp. This did not work so well, and next year we will try to get distance lecture rooms for most of the lectures.

# Student representatives comments

The course lectures were easy to follow and course information was easily accessible, course book was provided and extra reading material in the form of scientific papers were also provided where appropriate Above average reported that, the course components - lectures, written exercises, lab practicals supported their learning and there was positive teacher student interaction. This really encouraged us to interact and ask questions during the class as well as share different opinions on topics covered during the journal club.

The contribution from the class was balanced as everyone could contribute irrespective of their gender, everyone was given the opportunity to speak and the course made a strong reflection on the sustainable development goals in an international perspective which was thoroughly discussed in one of the journal clubs. However, financial sustainability was not captured during the course. Conducting research in an international perspective as well as issues on research ethics and benefit sharing were thoroughly demonstrated using a very clear exercise in class.

Generally, the learning environment has been good but most students had issues dealing with written assignments and digital lab. Some students indicated the need to provide some introductory lecture for the digital lab and also increase the duration for submission of the digital lab assignments. Moreover, the peer review for written assignments should be extended after the journal club as that can help us understand the content better to enable us provide better feedback.

The written assignments were also lots of work as more than half of the students reported they generally spend more than 32.7 hours per week doing the course assignment. Majority of the students indicated that, the feedback from Jens (the course leader) on the written assignments were really helpful in improving their scientific writing skills. Some also indicated that, they will prefer to have an introductory background on the written assignment since they find it difficult to understand the themes in the papers so they had to avoid the journal club as a result. In general, the written assignments, lab practical and the digital lab was really helpful in improving our understanding of the course.

Generally, more than average of the students enjoyed the lectures on transcriptomics, metabolomics and proteomics because they were guest lectures and experts from the respective fields. However, we believe that, it can be more helpful to have face to face interaction with these experts.

The class room (Sal H) has been satisfactory and supportive especially lectures delivered via zoom from Umea University. We prefer this room to the other bigger rooms (such as Sal O) irrespective of the time of the day. We generally had small issues when the lectures are from distance and it becomes really worse when it's a whole day lecture. We find it difficult seeing gestures from the professor when pointing on a diagram and we suggest that, at least the use of laser pointers could help a bit.

Whilst most of the students indicated the exams provided the opportunity to demonstrate the knowledge gained from the course, less than 20% indicated the course content was rather difficult to know exactly what to expect for the exams.

The course leader has been patient and tries to explain the concepts even on one on one occasions in his office to some students which I think is very good and positive. He has also been available for us outside the schedule hours and has organized some pre lab trainings on pipetting to some students before the lab week. This I think was really good and has positively contributed to our overall understanding of the course. The overall impression of the class on the course is excellent.