

Introduction to Plant Biology for Sustainable Production BI1294, 10039.2021

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

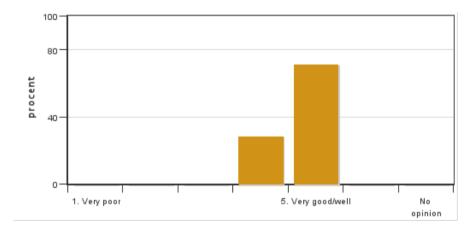
Evaluation report

Evaluation period: 2020-10-25 - 2020-11-15

Answers 7 Number of students 17 Answer frequency 41 %

Mandatory standard questions

1. My overall impression of the course is:

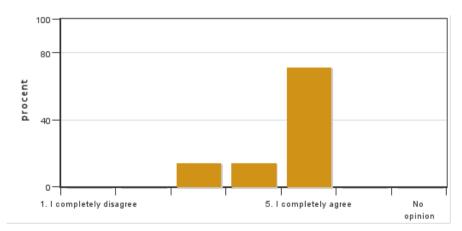


Answers: 7 Medel: 4,7 Median: 5

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

No opinion: 0

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



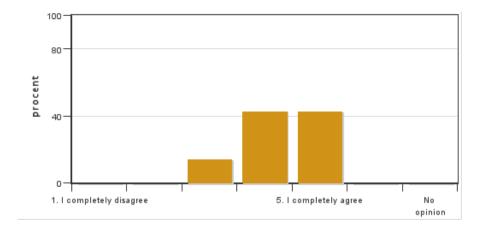
Answers: 7 Medel: 4,6 Median: 5

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

5: 5

No opinion: 0

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



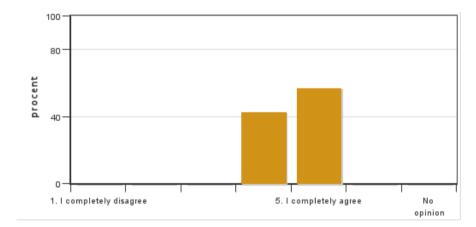
Answers: 7 Medel: 4,3 Median: 4

1: 0 2: 0

3: 1 4: 3 5: 3

No opinion: 0

4. The information about the course was easily accessible.



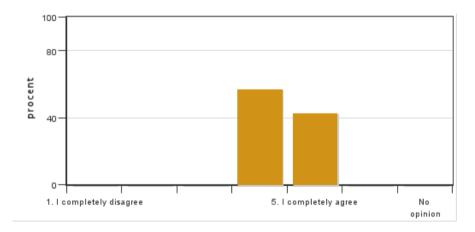
Answers: 7 Medel: 4,6 Median: 5

1: 0 2: 0 3: 0

4: 3 5: 4

No opinion: 0

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



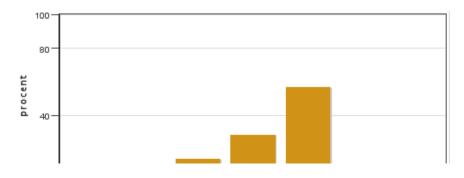
Answers: 7 Medel: 4,4 Median: 4

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

5: 3

No opinion: 0

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



Answers: 7 Medel: 4,4 Median: 5

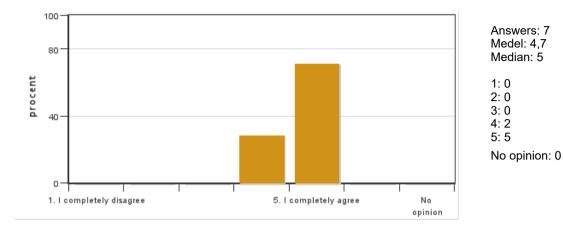
1: 0 2: 0

2: 0 3: 1

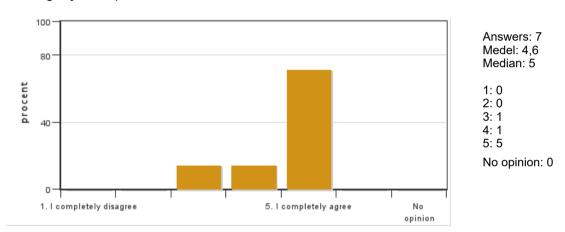
4: 2 5: 4

No opinion: 0

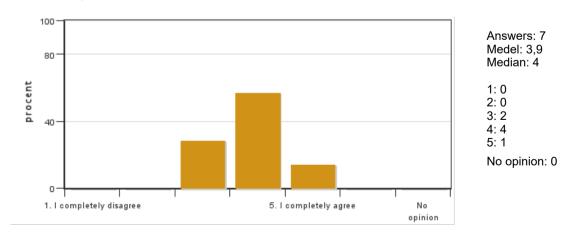
7. The physical learning environment (facilities, equipment etc.) has been satisfactory.



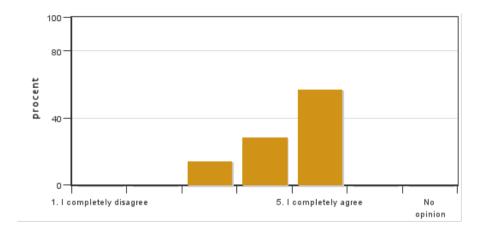
8. The examination(s) provided opportunity to demonstrate what I had learnt during the course (see the learning objectives).



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).



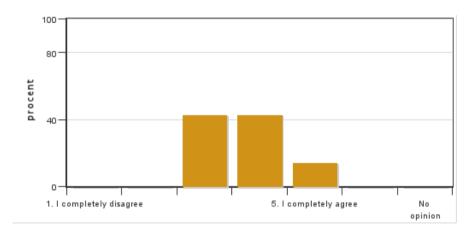
Answers: 7 Medel: 4,4 Median: 5

1: 0 2: 0 3: 1

3. 1 4: 2 5: 4

No opinion: 0

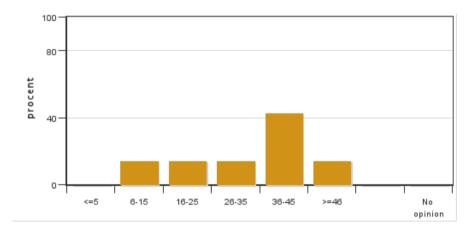
11. The course covered international perspectives.



Answers: 7 Medel: 3,7 Median: 4 1: 0 2: 0 3: 3 4: 3 5: 1

No opinion: 0

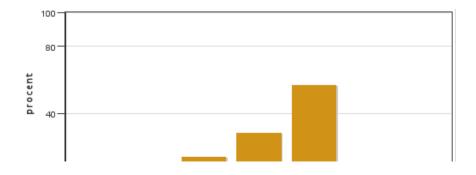
12. On average, I have spent ... hours/week on the course (including timetabled hours).



Answers: 7
Medel: 32,3
Median: 36-45
≤5: 0
6-15: 1
16-25: 1
26-35: 1
36-45: 3
≥46: 1

No opinion: 0

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



Answers: 7 Medel: 4,4 Median: 5

1: 0 2: 0

3: 1

4: 2 5: 4

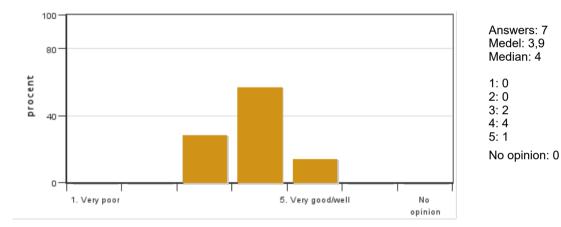
No opinion: 0



- 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?



- 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. What is your opinion on the lectures and seminars about evolution?

Course leaders comments

This course runs simultaneously in Alnarp, Umeå and Uppsala. HT2020 only had students in Alnarp (seven active) and Uppsala (seventeen active). Eleven students answered the course evaluation, which for the combined course evaluation give an answer frequency of 46%.

The overall impression of the course was good, average 4,6 points on grade 1-5.

Due to the Covid-19 pandemic, several adjustments had to be made from previous years:

1. The number of students that could attend lectures on campus was restricted. Therefore alternating groups of the students followed the classes from home. The course uses the distance learning lecture rooms(SalH and

Plantan), which allow for a connection between campus locations and home computers. In general, the students found this arrangement acceptable, and they also liked the fact that they could meet lectures in person every second day. One comment about the lectures was that they should be extended to allow for questions.

- 2. In Uppsala laboratory practical was changed to a digital format and computer exercises. In general, students liked both the practical run in Alnarp and the computer exercises run in Uppsala, and efforts should be made to accommodate both for the coming years.
- 3. Part of the lectures has also changed from previous years to better prepare the students for the next course on the program (which also have changed).

The course put a large emphasis on writing skills and reading on original research articles. The students appreciate this, but towards the end of the course, there was a conflict between written assignments, the evolution workshop and unscheduled time to study for the exam. Next year the changes in the schedules should be made to allow additional time for self-studies towards the end of the course.

Student representatives comments

Summary of the BI1294 course evaluations:

1.Overall impression of the course (4.7 / 5)

Comprehensive, effective, good insight, helpful in the following courses

- 2.Course content correlated to the objectives of the course, also the connection with sustainable development. (4.6 / 5)
- 3.Students' prior knowledge was sufficient to benefit from the course. (4.3 / 5)

Favoured with a background in genetics, plant and molecular biology. Needs more consideration of agriculture/agronomy students.

4.Accessibility of the course information. (4.6 / 5)

More copies of the Coursebook are required in the library.

- 5. Course components (lectures, course literature, exercises etc.). (4.4 / 5)
- 6.The social learning environment. (4.4 / 5)

Mainly on ZOOM meeting due to the social-distance rules

- 7. The physical learning environment (facilities, equipment etc.). (4.7 / 5)
- 8.The examination(s) (4.6 / 5)
- 9. Sustainable development aspects. (3.9 / 5)

More on environmental but less about social and financial sustainability aspect.

10.International perspectives. (3.7 / 5)

More focused on the European perspective

11.Average study hours (36 - 45 hours)

A lot of assignments to do, and too much work before the exam. e.g., evolution lecture with the presentations.

12.Gender and equality regarding content as well as teaching practices. (4.4 / 5)

Well-presented and really appreciable.

13.Experience about teaching on distance (4.4 / 5)

Very effective, comfortable, a few technical issues but acceptable. Better have more Q&A time on the ZOOM meetings.

14. Positive feedbacks on teaching on a distance

Easy and effective to follow lectures and leave comments with Screen chare function. Nice openness of group discussions. Convenience for students living far from the campus.

15. Needs to be improved on teaching on a distance

Teamwork on distance, technical issues on audio and visual transmission sometimes. Writing on the blackboard was hard to be seen from ZOOM meeting. Need more time for discussion after the lecture end.

Unable to do wet lab practice with distance teaching.

More Feedbacks and suggestions on:

1.Course modules

Feedbacks: Good as an introduction course, with interesting, well-structured and organized lectures; focused on basic plant anatomical structure and gene regulation. Considered distinct backgrounds.

Suggestions: more detailed information

17.Written assignments and journal clubs:

Feedbacks: Improved writing skill, very helpful in article reading and rational thinking; a lot of work but good to practice; an interactive way of learning positively following scientific questions

Suggestions: written assignment D is too closed to the final exam

2.Lab practical:

Feedbacks: Very productive, a bit challenging for students without prior knowledge on Bioinformatics; Too much work to do for a very short deadline.

Suggestions: Needs more time for the report submission

3.Lectures on transcriptomics, metabolomics and proteomics:

Feedbacks: very informative and interesting; provided fundamental knowledge for the journal club section; but too general.

Suggestions: need more time and lectures on these topics; better to be more involved at the beginning of the course

4.Lectures on ethics, science communication and genetic resources:

Feedbacks: very interesting; provided new insights to me regarding the academic research community and debate on legislation; fascinated by the ethical and legal perspectives of biotech; helpful to understand how to interact with media and how to collect research material from different parts of the world.

Suggestions: For the Ethics section: change the structure of the seminar to a real GMO debate, in which the students could be assigned to two groups standing on the opposite side of GMO legislation.

5.Lectures and seminars about evolution:

Feedbacks: Well structured, interesting and a lot of discovery. The content was in good quality but a bit too general, and not enough to support solving the tasks in the seminar; Seminar section was too short, and not enough time for a teamwork preparation for the presentation; great chance to experience good teamwork.

Suggestions: the lecture and the seminar would be better to have them a bit more spread in the time. More guidelines from the teacher side on how plant scientists nowadays think and discuss evolution questions, and what scientific methods or tools could be applied to study the evolutionary path (examples of the experimental design and workflow of research on evolution). The number of the suggested article could be cut down to 3 or 4, only list the most essential ones.

6. comments on distance lectures:

Feedbacks: Well-managed in very good quality and not a problem at all; enjoyable as much as the lectures on campus. fully support the idea of remote teaching as concerning about the COVID-19 crisis

Suggestions: More experts on different plant biotech topics should be invited for guest lectures in the future courses.

Kontakta support: support@slu.se - 018-67 6600