Genetic diversity and plant breeding
BI1103, 20071.2324

15 Hp
Pace of study = 100%
Education cycle = Advanced
Course leader = Adrien Sicard

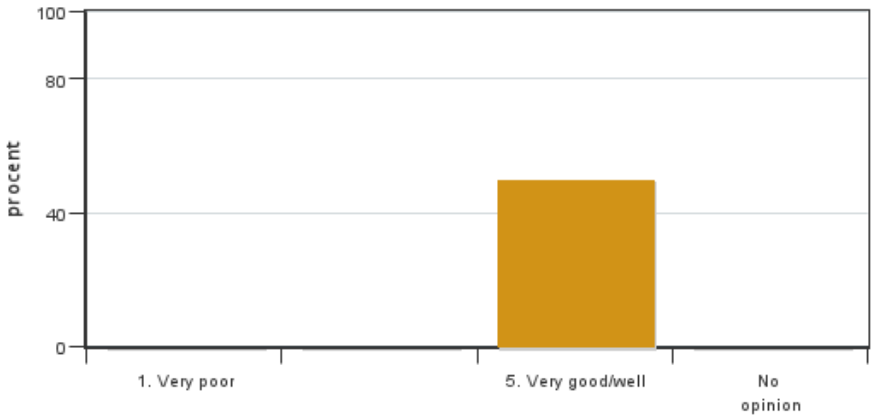
Evaluation report

Evaluation period: 2024-01-07 - 2024-01-28

Answers	6
Number of students	7
Answer frequency	85 %

Mandatory standard questions

1. My overall impression of the course is:

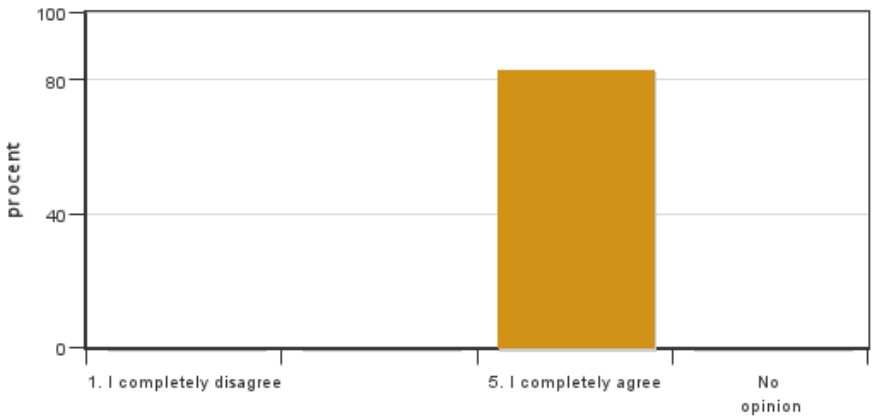


Answers: 6
Medel: 4,3
Median: 4

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

No opinion: 0

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

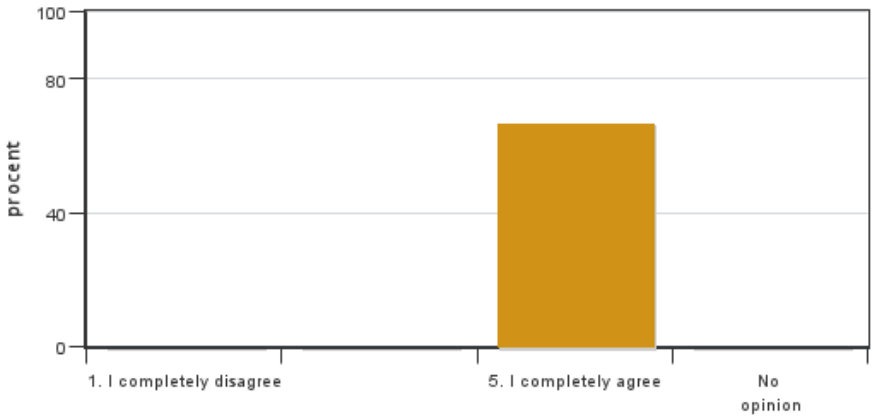


Answers: 6
Medel: 4,8
Median: 5

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

No opinion: 0

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

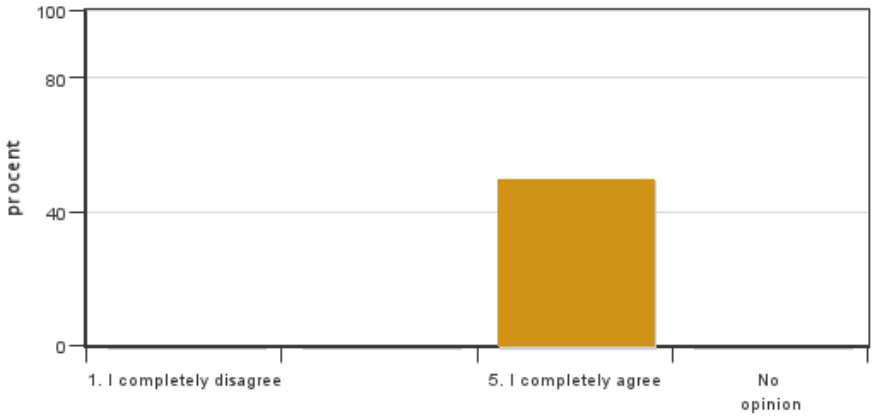


Answers: 6
Medel: 4,5
Median: 5

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

No opinion: 0

4. The information about the course was easily accessible.

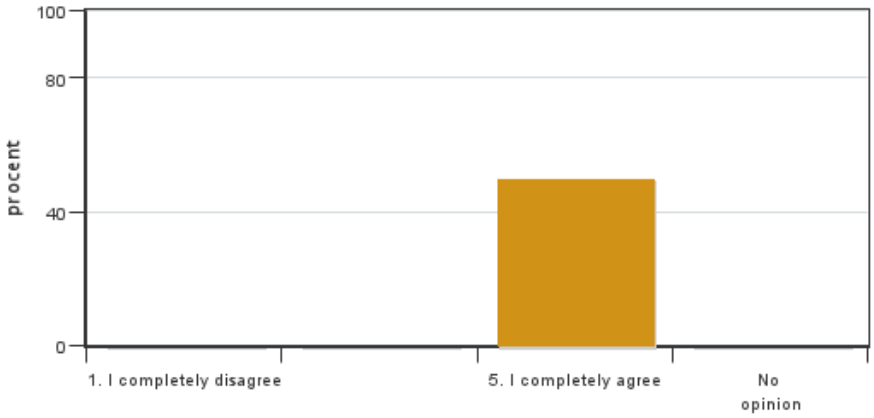


Answers: 6
Medel: 4,5
Median: 4

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

No opinion: 0

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

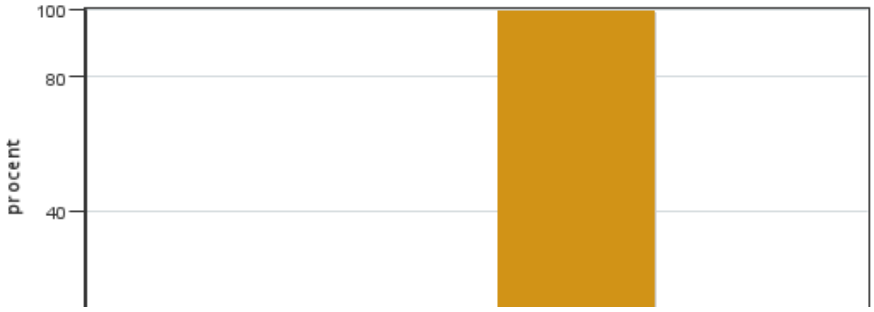


Answers: 6
Medel: 4,0
Median: 4

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

No opinion: 0

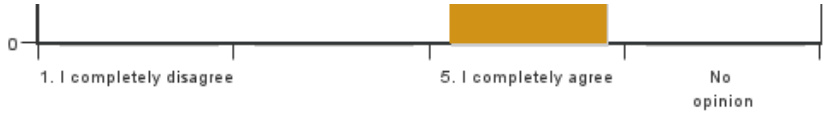
6. The social learning environment has been inclusive, respecting differences of opinion.



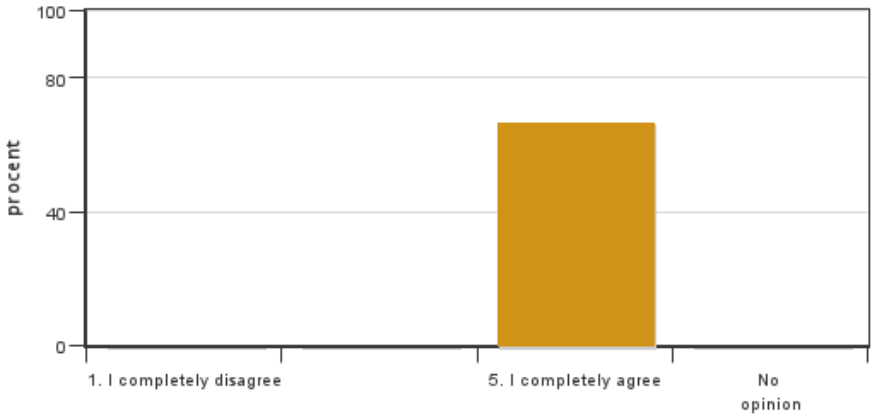
Answers: 6
Medel: 5,0
Median: 5

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

No opinion: 0



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

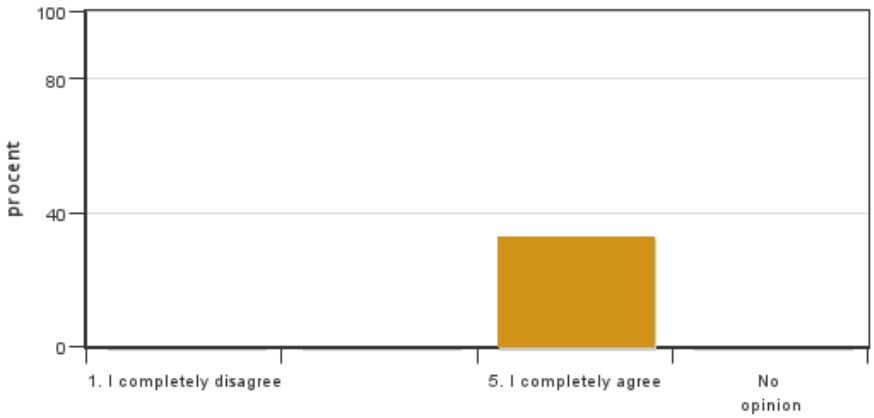


Answers: 6
Medel: 4,7
Median: 5

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

No opinion: 0

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

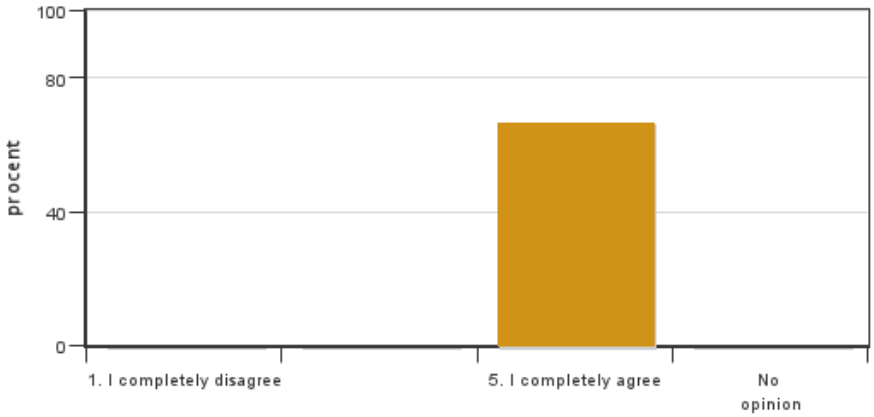


Answers: 6
Medel: 4,2
Median: 4

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

No opinion: 0

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

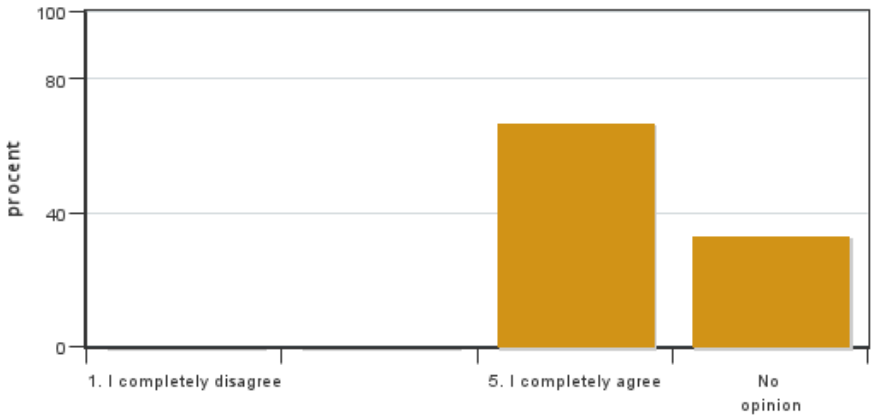


Answers: 6
Medel: 4,7
Median: 5

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

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).

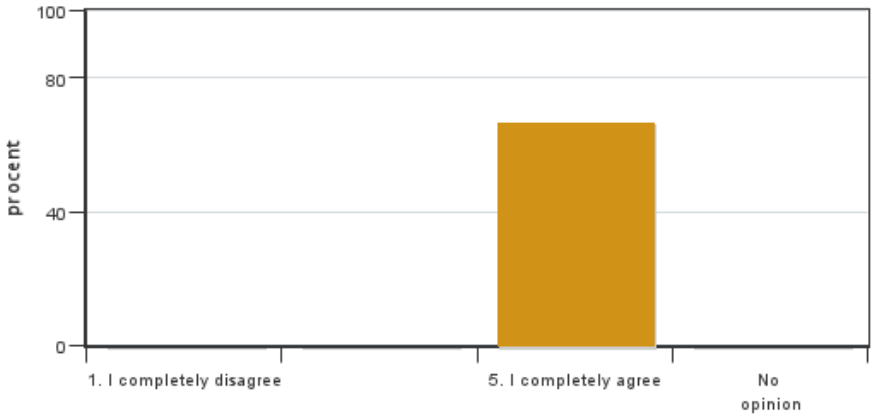


Answers: 6
Medel: 5,0
Median: 5

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

No opinion: 2

11. The course covered international perspectives.

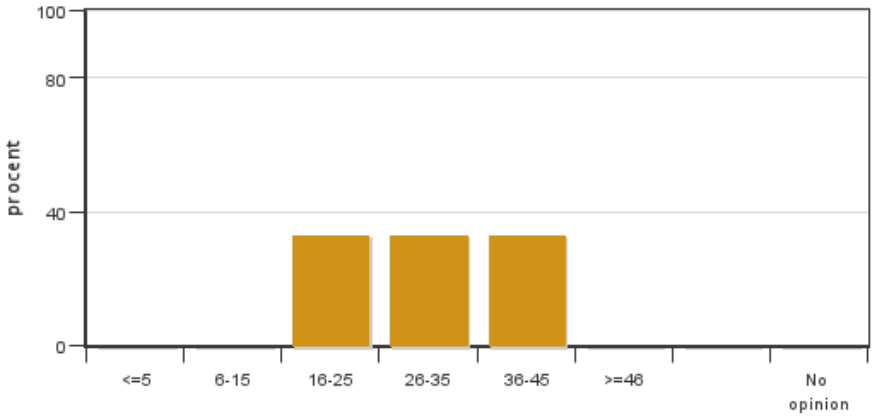


Answers: 6
Medel: 4,5
Median: 5

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

No opinion: 0

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



Answers: 6
Medel: 30,0
Median: 26-35

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

No opinion: 0

Course leaders comments

The BI1103 course is a Master's level course introducing advanced concepts in plant genetics and plant breeding. This year, 7 students registered for the courses, of which about 57% came from the agricultural program and the remaining students were international exchange students. The course attendance decreased compared to previous years, likely due to the discontinuation of the rotation master program involving Stockholm University, Uppsala University, and the Swedish University of Agricultural Sciences (SLU) within the plant biology sustainable production curriculum. The course curriculum includes lectures, in-class activities, a literature review project, computer laboratory sessions, and practical laboratory sessions. Assessment of student progress encompasses two written examinations (5 credits each), a literature review assignment (5 credits), and a laboratory report (5 credits).

Changes in the course compared to previous years.
While the course structure and content closely resembled previous years, we also incorporated students' feedback to

enhance the overall course quality. Drawing from recommendations provided by former students:
o The laboratory practical was modified: We ensured detailed information was provided at the beginning and throughout the activity regarding its objectives, methods, and anticipated outcomes, aligning the conducted activities with concepts learned in class. Additionally, we reorganized the wet labs to minimize waiting times and enhance clarity.
o We mitigated course overlap by eliminating one lecture session.
o To improve workload distribution, we reduced the number of weekly assignments and converted some of the assignments into lectures.
o Lecture start times were harmonized throughout the course schedule, aligning with the academic quarter.
o A change in teacher overseeing the literature project was implemented, accompanied by supplementary question-and-answer sessions dedicated to this aspect.
o We reduced the course litterature aiming to focus on the most relevant ones.
The students evaluated the course by answering two questionaries, one at half-time and another one at the end of the course period.

Half-time evaluation:
Six students out of 7 students answered the half-time course evaluation.
Overall, students provided favorable feedback, describing the course as accessible and well-organized on a global scale. They expressed appreciation for the course content, laboratory practical sessions, and the equilibrium achieved between theory and practical exercises. They nevertheless found that some of the organization of some of the laboratory activities could be further improved. They noted that some of the lectures and associated handouts could be clearer and better structured. To improve the course, the students suggested to:
• Start earlier some of the laboratory activities.
• Adding some introduction to computational genetics and illustrate additional computational applications.
• Improve the quality of the handout in order to facilitate learning. Ensure that enough background information is given at each lecture and stress better the importance of different lectures for the exam.
These comments were passed on to all teachers in the course and we try to improve the quality and clarity of the course's materials.

Final evaluation
Six out of seven students completed the final evaluation questionnaire, resulting in a response rate of approximately 85%, which marks an improvement compared to previous years. The overall impression garnered from the responses was highly positive, with a median score of 4.0 out of 5, consistent with the previous year's rating. The implemented changes appear to have been advantageous, as indicated by the significantly improved scores across all questions compared to previous years.
Based on the student comments:
The course appears to be accessible to the majority of students. They perceived that the course content effectively aligned with the learning objectives, as reflected in Question 2, which garnered an average rating of 4.8. Additionally, students generally felt that their existing knowledge adequately prepared them for the course, as shown by the average score of 4.5 for Question 3. However, one student expressed concern that 5 credits for prior knowledge in genetics might be insufficient for feeling fully confident in the course. Regarding various course components, students had a more mixed perception (Question 5 received an average rating of 4). Some students noted instances where lectures lacked clarity and corresponding handouts lacked important information. Additionally, they mentioned that the organization of computer exercises could have been improved.
In terms of exam questions, students felt that they aligned well with the concepts learned in class with the exception of the few lectures perceived to lack clarity (Question 8 received an average rating of 4.2).
The course organized was globally appreciated. The information about the course was easily accessible (Question 4 received 4.5 on average), and the teaching environment was considered pleasant (Question 6, 7, 10 and 11 all receive above 4.5 on average). However, occasional issues arose with lecture halls due to electronic equipment breakdowns, which some students felt compromised the quality of certain lectures. The last weeks of the course were judged a bit intense by some of the students. Students acknowledged the practicals for effectively reinforcing the theoretical concepts discussed in lectures.
The students also had a few suggestions to improve the course. Those included:
• Moving the final exam to December to alleviate the workload during the last week.
• Enhancing the quality and clarity of certain lectures.

Course leader's comments
This year's student evaluations indicate that several of the implemented changes have positively impacted the quality of course instruction. Personally, I found the course to cultivate a positive learning environment that fosters student engagement and interaction. The lab sessions were notably improved, aligning better with theoretical content and offering clearer guidance, which was well-received by the students. However, there is still room for improvement in organizing wet labs and computational exercises. Students continued to value exercise sessions linked to lectures, recognizing their role in clarifying and reinforcing teaching concepts, ultimately leading to higher success rates in final examinations. Nevertheless, there remains a need to enhance the quality of some lectures and perhaps provide clearer and more accessible course literature. Overall, the course left a very favorable impression, as evidenced by its higher average score compared to the previous year.The students provided useful feedback to improve this course's organization and teaching quality. Based on these recommendations, I plan to:
• Enhance the provision of background information and learning resources in Genetics to ensure students' confidence and comfort throughout the course.
• Explore options to reorganize the course schedule, aiming to alleviate workload pressures in the final week by adjusting examination dates and lab report deadlines.
• Highlight the importance of enhancing lecture quality and ensuring the accessibility of course materials.
• Continuously refine the organization of wet lab sessions and computer exercises to further enhance effectiveness and efficiency.

Student representatives comments

Overall, my classmates and I genuinely enjoyed this cours, for many it was the best one yet, though there are a few things that could be improved. While splitting the exam in two was a very good idea, the timing of the second exam was a little bit unfortunate, as it collided with several deadlines. This lead to a very unbalanced workload for the students, with a intense first week after the winter break followed by a rather lax schedual. Maybe doing the second examn before christmas could serve as a solution. Also several students had complained that some of the provided lectures (mainly disease resistance breeding) did not provide a good support for the final exam. On few occasions there were issues regarding the locations the lectures were held. That said, the implementation of the lab into the course and timing of lab relevant lectures was appreciated and done well. Also the canvas page was structured and easy to navigate (compared to other courses) and the guest lectures recieved a lot of positive feedback.