Animal genetics - health, behaviour and welfare
HV0167, 30016.2324

15 Hp
Pace of study = 100%
Education cycle = Advanced
Course leader = Åsa Ohlsson

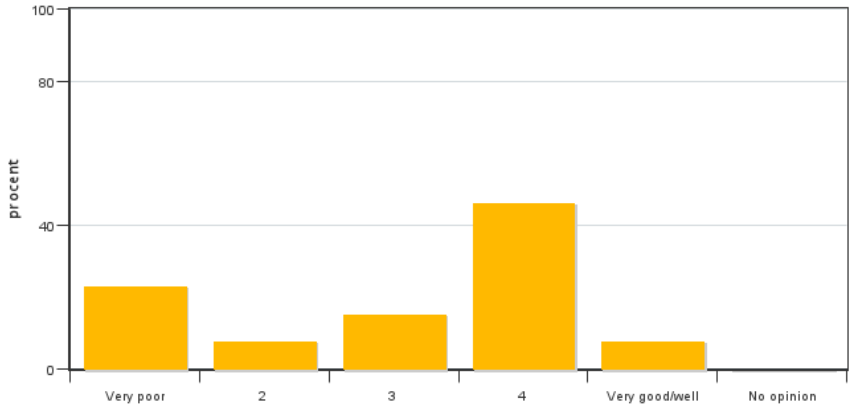
Evaluation report

Evaluation period: 2024-05-26 - 2024-06-16

Answers	13
Number of students	15
Answer frequency	86 %

Mandatory standard questions

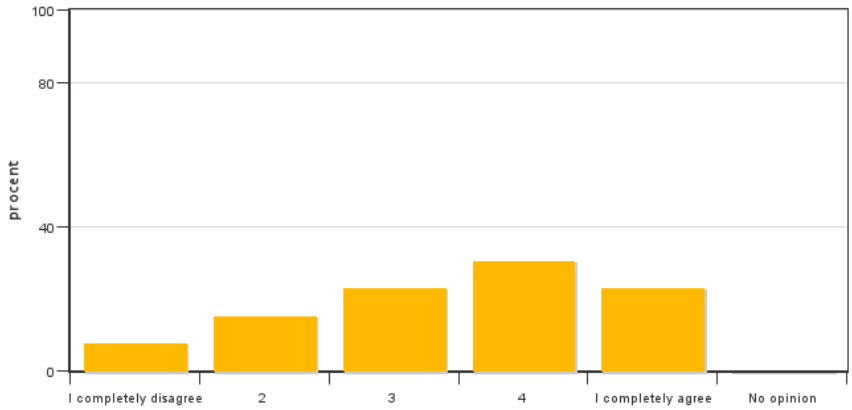
1. My overall impression of the course is:



Number of answers: 13
Average: 3,1
Median: 4

Very poor : 3
2: 1
3: 2
4: 6
Very good/well: 1
No opinion: 0

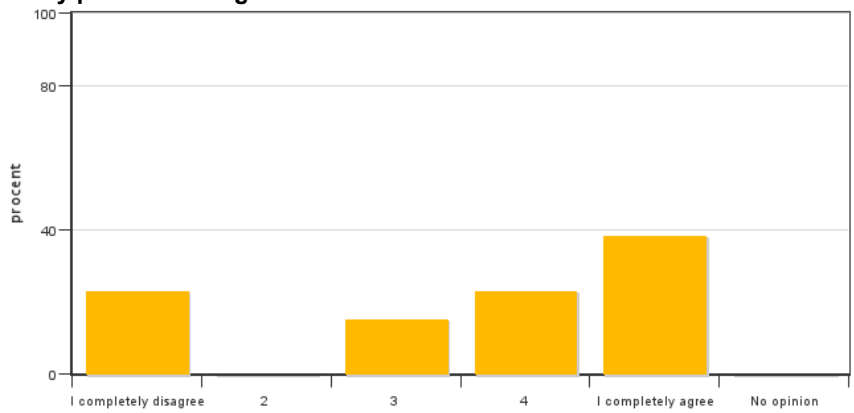
2. I found the course content to have clear links to the learning objectives of the course.



Number of answers: 13
Average: 3,5
Median: 4

I completely disagree: 1
2: 2
3: 3
4: 4
I completely agree: 3
No opinion: 0

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

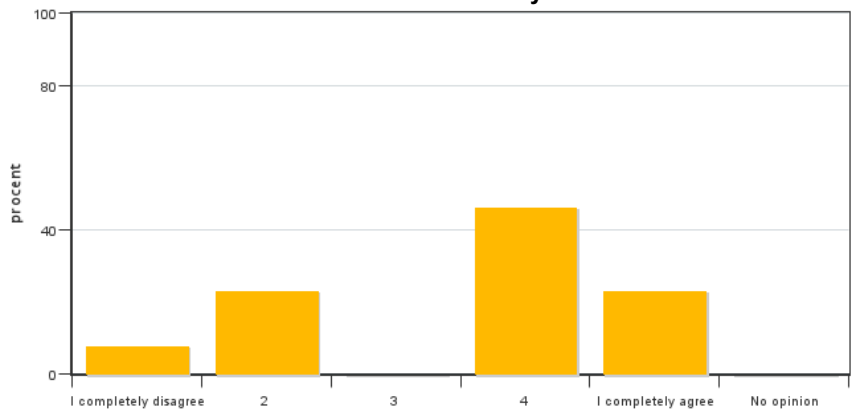


Number of answers: 13
Average: 3,5
Median: 4

I completely disagree: 3
2: 0
3: 2
4: 3
I completely agree: 5

No opinion: 0

4. The information about the course was easily accessible.

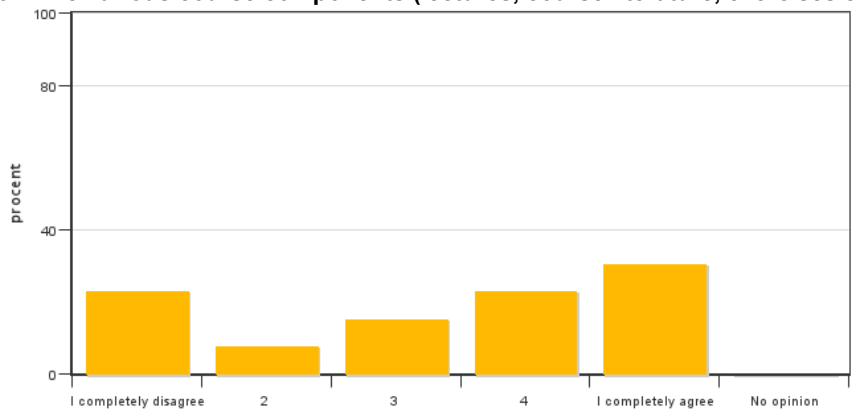


Number of answers: 13
Average: 3,5
Median: 4

I completely disagree: 1
2: 3
3: 0
4: 6
I completely agree: 3

No opinion: 0

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

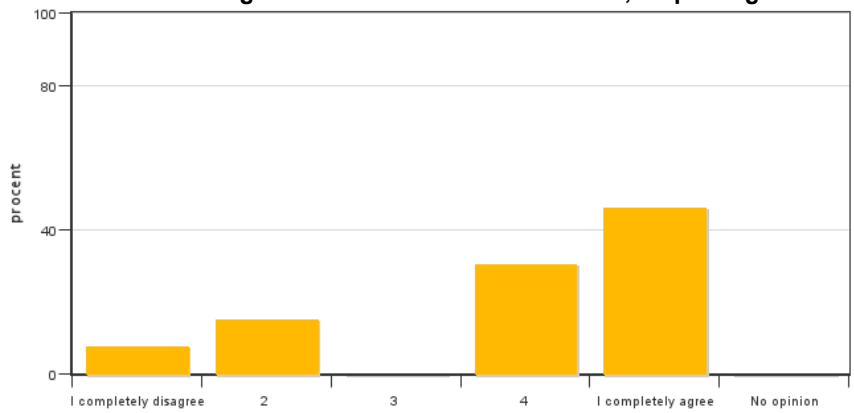


Number of answers: 13
Average: 3,3
Median: 4

I completely disagree: 3
2: 1
3: 2
4: 3
I completely agree: 4

No opinion: 0

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

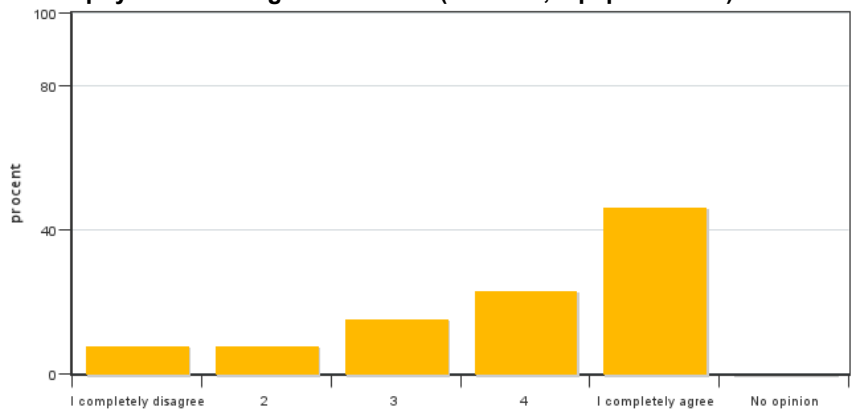


Number of answers: 13
Average: 3,9
Median: 4

I completely disagree: 1
2: 2
3: 0
4: 4
I completely agree: 6

No opinion: 0

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

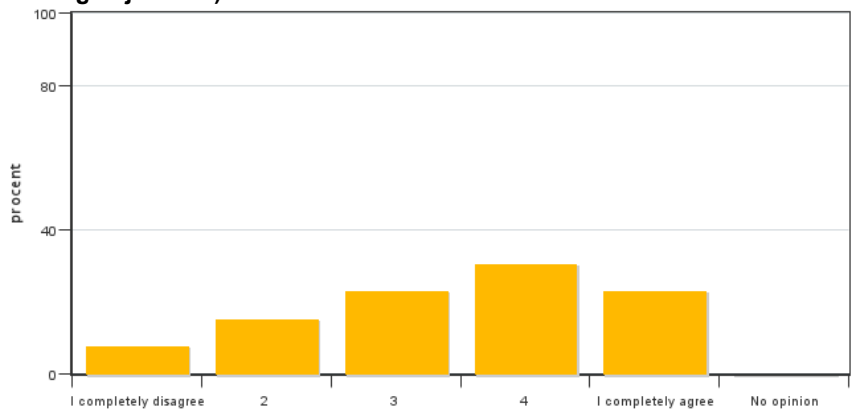


Number of answers: 13
Average: 3,9
Median: 4

I completely disagree: 1
2: 1
3: 2
4: 3
I completely agree: 6

No opinion: 0

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

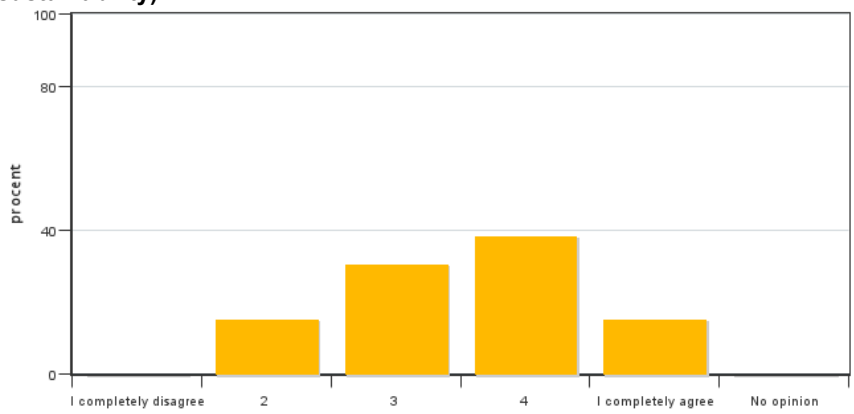


Number of answers: 13
Average: 3,5
Median: 4

I completely disagree: 1
2: 2
3: 3
4: 4
I completely agree: 3

No opinion: 0

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

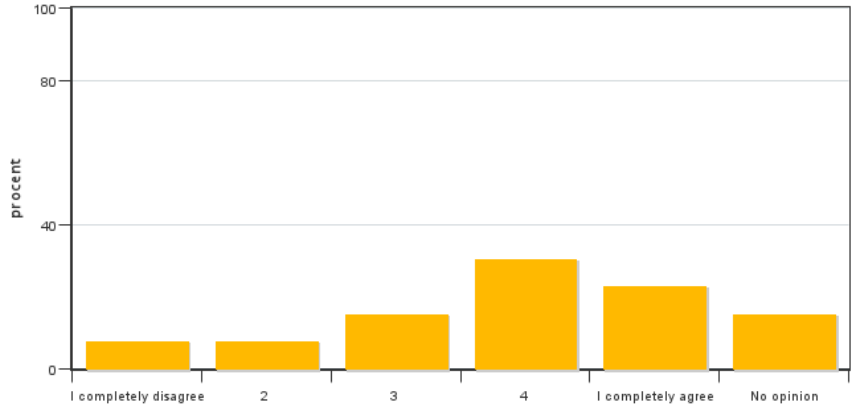


Number of answers: 13
Average: 3,5
Median: 4

I completely disagree: 0
2: 2
3: 4
4: 5
I completely agree: 2

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).

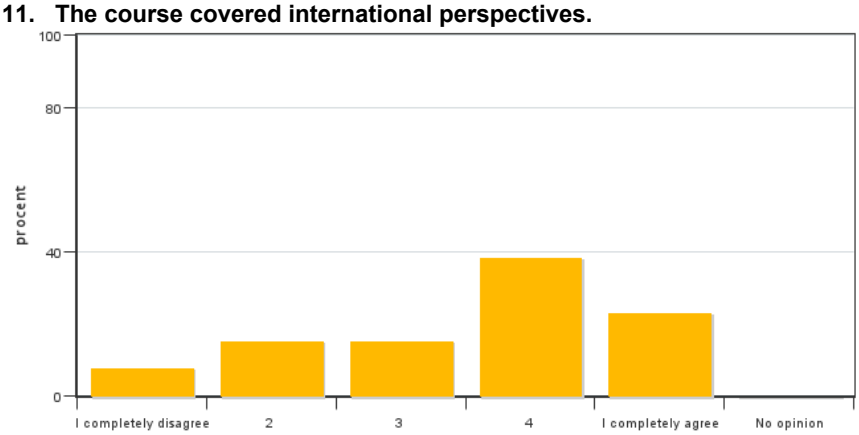


Number of answers: 13
Average: 3,6
Median: 4

I completely disagree: 1
2: 1
3: 2
4: 4
I completely agree: 3

No opinion: 2

11. The course covered international perspectives.

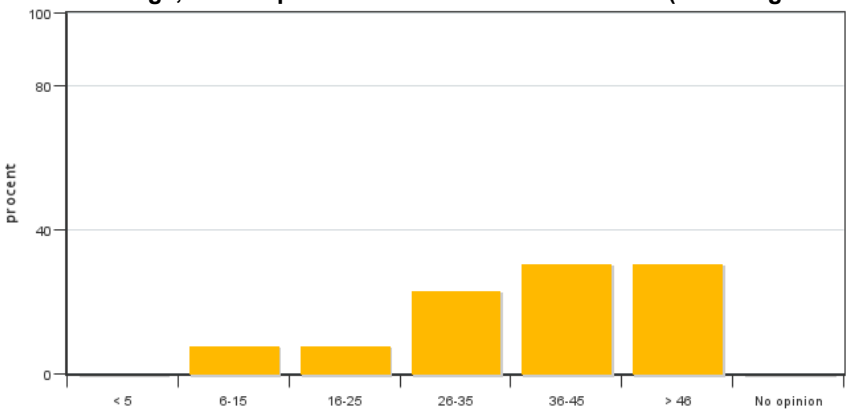


Number of answers: 13
Average: 3,5
Median: 4

I completely disagree: 1
2: 2
3: 2
4: 5
I completely agree: 3

No opinion: 0

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



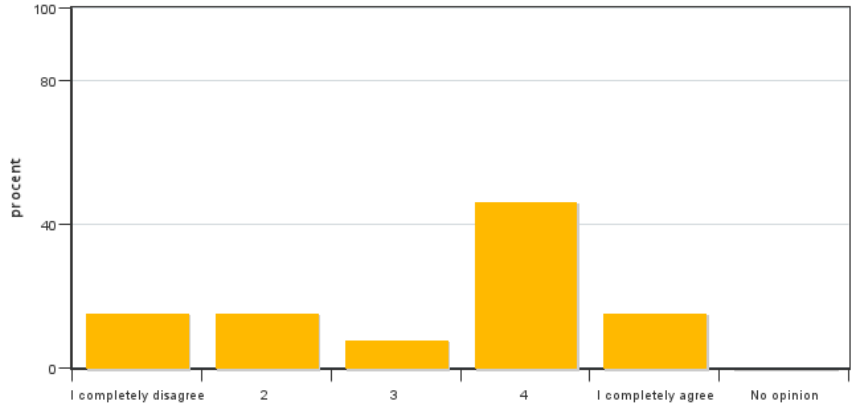
Number of answers: 13
Average: 35,7
Median: 36-45

< 5: 0
6-15: 1
16-25: 1
26-35: 3
36-45: 4
> 46: 4

No opinion: 0

Additional own questions

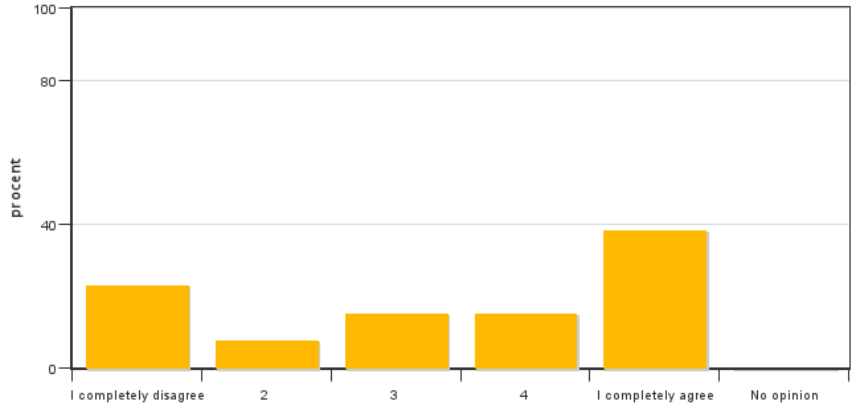
13. The lectures were well planned and supported my learning.



Number of answers: 13

I completely disagree: 2
2: 2
3: 1
4: 6
I completely agree: 2
No opinion: 0

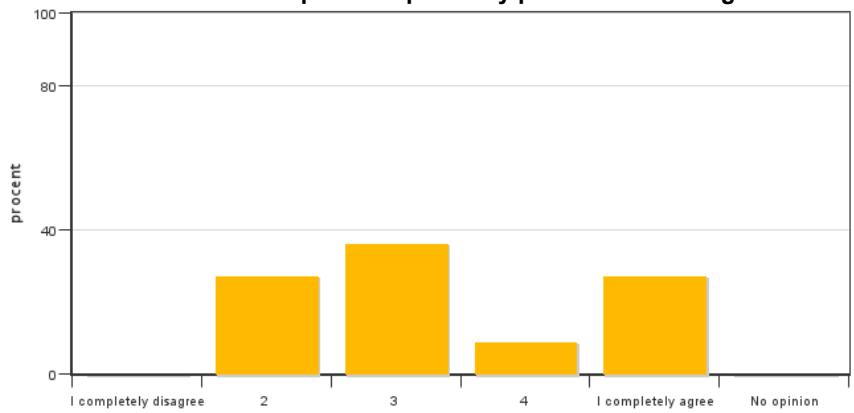
14. The course literature was interesting and I gained useful knowledge.



Number of answers: 13

I completely disagree: 3
2: 1
3: 2
4: 2
I completely agree: 5
No opinion: 0

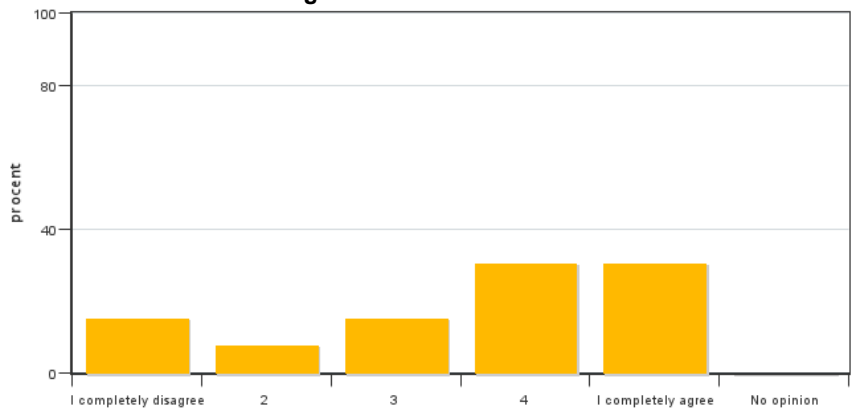
15. The basic lectures helped me update my previous knowledge on the targeted subjects.



Number of answers: 11

I completely disagree: 0
2: 3
3: 4
4: 1
I completely agree: 3
No opinion: 0

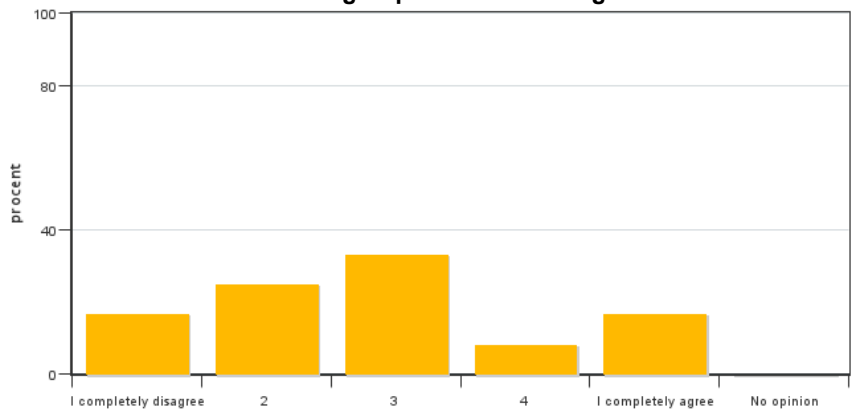
16. The basic discussions made me acquainted with my group members and their area of experties, which facilitated the case work together in the course.



Number of answers: 13

I completely disagree: 2
2: 1
3: 2
4: 4
I completely agree: 4
No opinion: 0

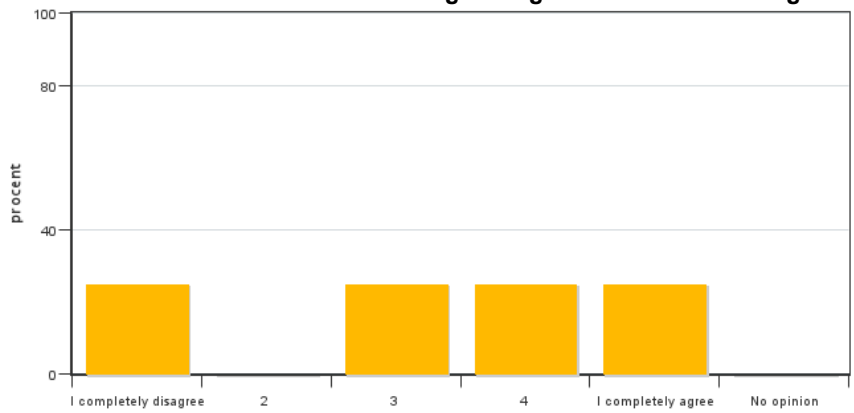
17. The case studies done in groups were well designed.



Number of answers: 12

I completely disagree: 2
2: 3
3: 4
4: 1
I completely agree: 2
No opinion: 0

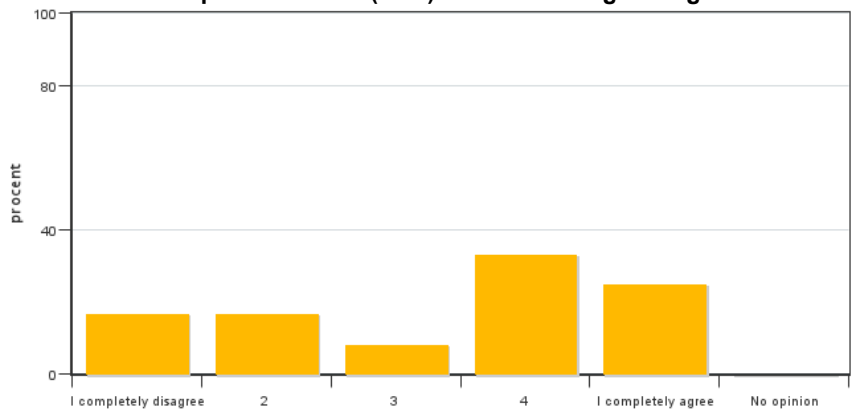
18. The different cases were interesting and I gained useful knowledge.



Number of answers: 12

I completely disagree: 3
2: 0
3: 3
4: 3
I completely agree: 3
No opinion: 0

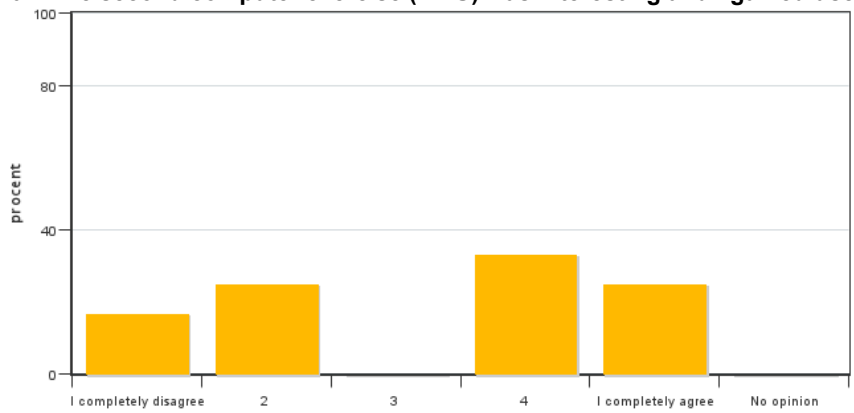
19. The first computer exercise (SAS) was interesting and I gained useful knowledge.



Number of answers: 12

I completely disagree: 2
2: 2
3: 1
4: 4
I completely agree: 3
No opinion: 0

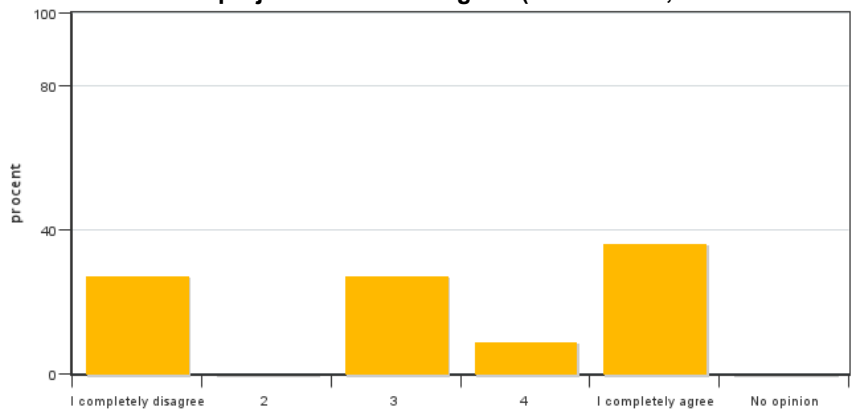
20. The second computer exercise (DMU) was interesting and I gained useful knowledge.



Number of answers: 12

I completely disagree: 2
2: 3
3: 0
4: 4
I completely agree: 3
No opinion: 0

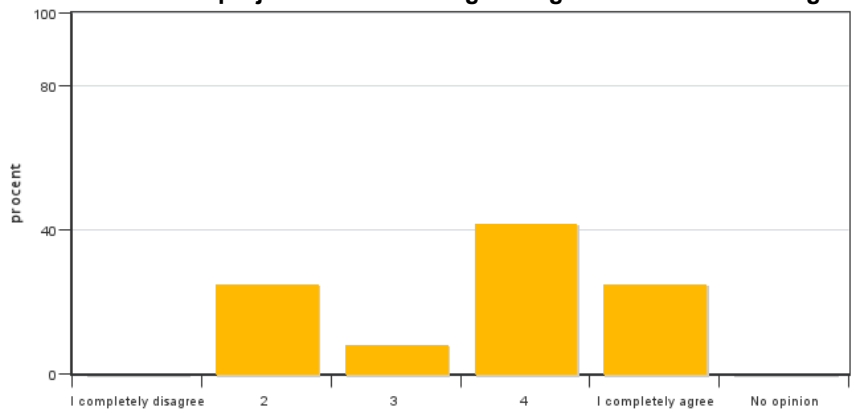
21. The individual project was well designed (instructions, time schedule...)



Number of answers: 11

I completely disagree: 3
2: 0
3: 3
4: 1
I completely agree: 4
No opinion: 0

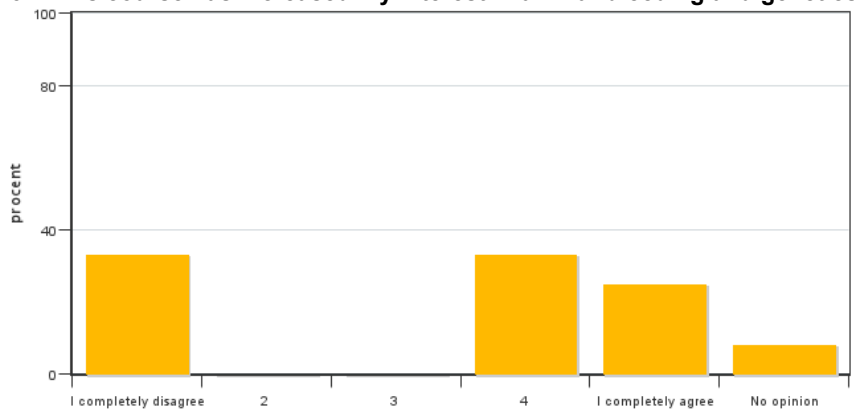
22. The individual project was interesting and I gained useful knowledge.



Number of answers: 12

I completely disagree: 0
2: 3
3: 1
4: 5
I completely agree: 3
No opinion: 0

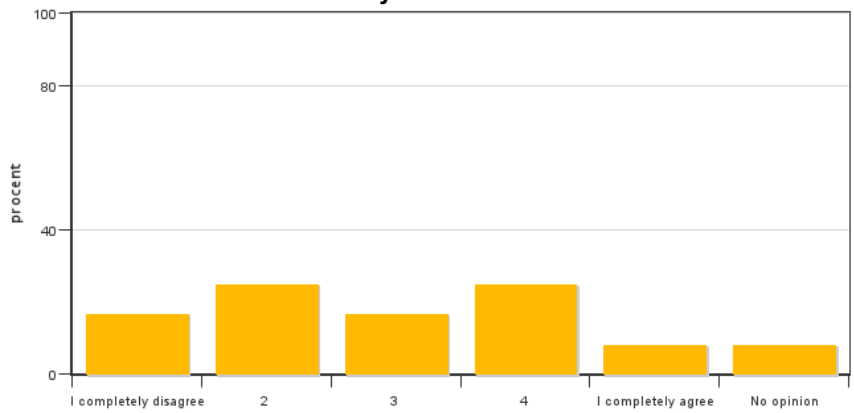
23. This course has increased my interest in animal breeding and genetics.



Number of answers: 12

I completely disagree: 4
2: 0
3: 0
4: 4
I completely agree: 3
No opinion: 1

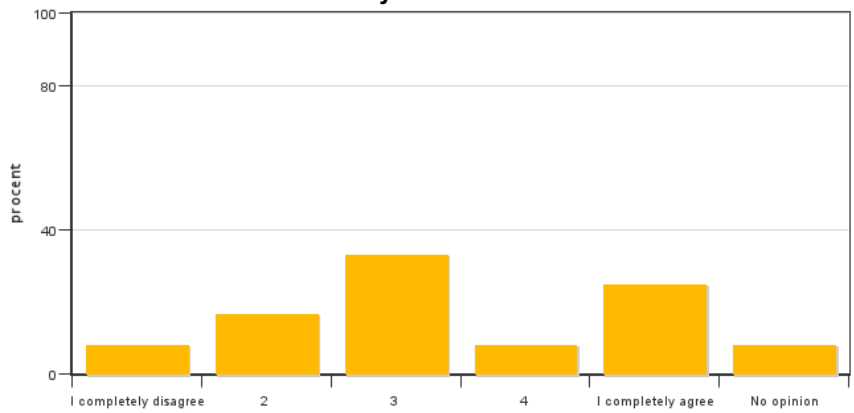
24. This course has increased my interest in animal behaviour.



Number of answers: 12

I completely disagree: 2
2: 3
3: 2
4: 3
I completely agree: 1
No opinion: 1

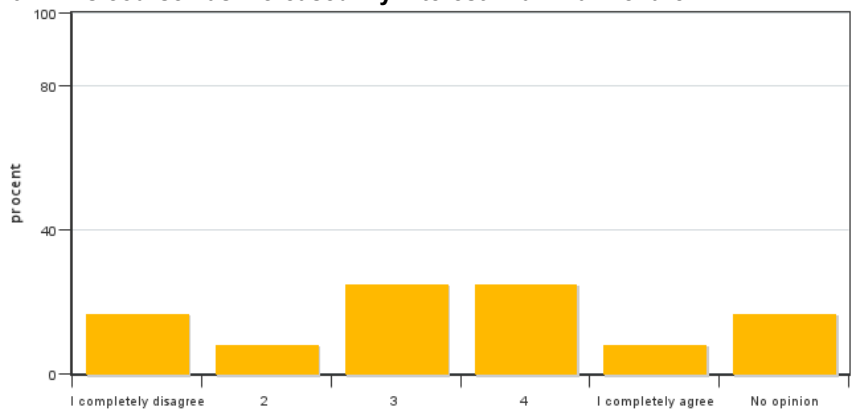
25. This course has increased my interest in animal health.



Number of answers: 12

I completely disagree: 1
2: 2
3: 4
4: 1
I completely agree: 3
No opinion: 1

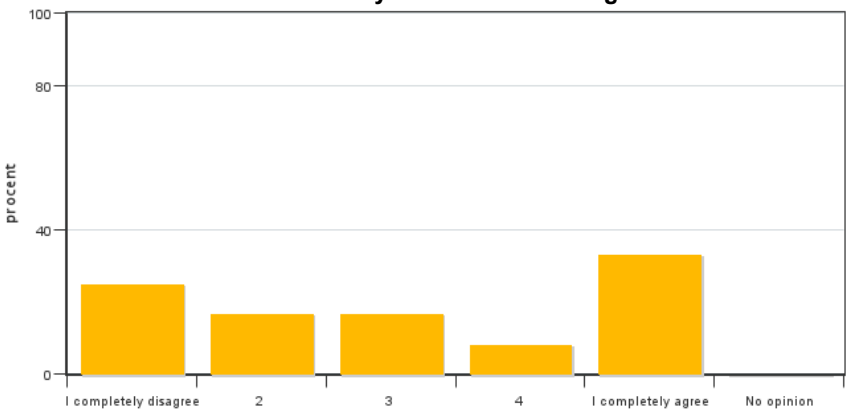
26. This course has increased my interest in animal welfare.



Number of answers: 12

I completely disagree: 2
2: 1
3: 3
4: 3
I completely agree: 1
No opinion: 2

27. This course has increased my interest for working with research in the future.



Number of answers: 12

I completely disagree: 3
2: 2
3: 2
4: 1
I completely agree: 4

No opinion: 0

28. In this course, I especially appreciated...

28. How can the course be improved?

28. My tips to the students for next year are...

Course leaders comments

Animal genetics – health, behavior and welfare, was held on site at campus. Fifteen students were enrolled to the course this year and 13 of those (86%) provided written course evaluation. In association with the final day of course, an additional oral course evaluation was held with the students, which in majority also reflects the written report. In general, the course evaluation indicated a good impression of the course (median score 4 out of 5), but scoring slightly less in general than previous years. A majority, if not all, of the students followed all deadlines, while the presence on non-mandatory lectures and exercises were sometimes low. This is partly a concern, since many students also answered that they did not read the suggested course literature. The course included several assignments and deadlines, which required the students to plan their work already from the start of the course. The students commented that these written assignments took a lot of time and they would appreciate adjustments of these assignments in terms of clarification of instructions or just adapt some to a written exam instead. The course leader has taken this to heart and it has been discussed among the course administration to adjust and adapt these assignments for next year. The general plan is, at the moment, not to introduce a written exam, but that may change in the future if the alternations are not met with good reviews from the students in future course evaluations.

One improvement requested by the students was to further extend the focus on molecular genetics in the course. This was extended already last year with an additional lecture on methods in molecular genetics and was met with good reviews both previous and this year. Despite this even more in-depth lectures/information is still requested by the students, which the course leader will try to adapt to for next year. The background of the students enrolled in this course is often diverse, with some attending the course as part of a program at the SLU, while some attend it as a stand-alone master course. Some overlap with previous courses at SLU is therefore expected, but if students are missing some aspects, like more on the molecular genetic side due to not attending previous courses at SLU, then that is a valid point to adjust to help all students have a good learning outcome from this course.

Internal comments

Student representatives comments

My overall impression of the course is:

Median: 4

The course was very similar to Designing Breeding Programmes, and some found that it would be more helpful to have more focus on behaviour and disease. However, other students found that the course covered a wide range of topics, which is good for general knowledge, but may have lacked depth in each topic discussed. The group cases were considered to be confusing, therefore some felt that more time was needed to understand the instructions of the case rather than actually working on the case.

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

Median: 4

The course content could have related more to the learning objectives. There is the possibility that if the lectures were more in depth on genetics, it would match the expectations of students signing up for a genetics course. While the welfare aspects are important, the lectures on welfare were repetitive.

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

Median: 4

It is helpful to have the breeding course or have knowledge in genetics prior to taking this course.

The information about the course was easily accessible:

Median: 4

Finding the information could sometimes be challenging as there were different documents with similar instructions or multiple documents for the same task. The instructions/information did not always align with the schedule for deadlines. It would be useful to have streamlined documents for tasks and have them posted earlier for students to

access.

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

Median: 4

Some students really enjoyed the group work and found that this had supported their learning. The learning from a group project would be highly dependent on the students in the group. The lectures did not always seem to connect as well to the group projects.

The social learning environment has been inclusive. Respecting differences of opinion:

Median: 4

The social learning environment was nice as everyone was willing to contribute to discussions. The varying discussions were great for developing communication skills and working with peers with different personalities. Everyone seemed to be inclusive and respectful and willing to learn from their peers that had more knowledge in the questions asked. It was nice that students were not afraid to ask questions, demonstrating that the environment was inclusive and safe.

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

Median: 4

The physical learning environment was adequate, however it would have been beneficial to use other programs as well in the computer exercises, such as RStudio. Some students found that classroom ventilation could be improved.

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

Median: 4

A written exam may be more representative of the knowledge of individual students. The group projects were not helpful for individuals that have a strong background in genetics. There has been little variation in the course with the bulk of the work being placed in presentations. The group work may not always feel equally distributed and some students felt that the projects ended up being more focussed on handling group conflicts and organization over the actual material.

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

Median: 4

There could have been more focus or lectures on the social aspect of genetics rather than just ethical concerns. There was not a heavy focus on the environment.

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):

Median: 4

Some students felt that the course would benefit from hearing from a wider range of perspectives. The material provided tended to have a focus on a very western point of view.

The course covered international perspectives:

Median: 4

The international aspect of this course could have been expanded on. Most of the perspectives were within Europe.

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

Median Hours: 36-45

Depending on what is required of the week, the amount of time spent varied. However, some felt that more time needed to be provided for working on the individual project in the beginning of the course, for example, presentation of subjects and provision of supervisors- Some students would like the guidance from the supervisors for the individual project to be more equal between students, as some students were given a lot of support in comparison to others.

The lectures were well planned and supported my learning:

Median: 4

The lectures were helpful, but sometimes the placement was confusing when compared to what was expected to be done in the projects. The lectures did not always support working on the assignments.

The course literature was interesting and I gained useful knowledge:

Median: 4

The literature list was nice as students that were interested had the opportunity to read further. However, other students felt they had no time to read the literature or chose not to read it and would only read what was mandatory.

The basic lectures helped me update my previous knowledge on the targeted subjects:

Median: 3
The lectures were helpful for individuals that required a refresher in genetics, but to others, it would have been more helpful if there were more in-depth lectures on molecular genetics and GWAS prior to the projects. The statistics lecture was extremely helpful.

The basic discussions made me acquainted with my group members and their area of experties, which facilitated the case work together in the course:

Median: 4

The multiple basic discussions did not feel necessary as the groups remain the same for the duration of the course. However, these discussions allowed for individuals that were weaker in some aspects of the course to learn more on the subject from their peers.

The case studies done in groups were well designed:

Median: 3

More distinction should be put on steps 2 and 3 of the cases as it was confusing on what was meant to be done and what was an overlap. As the cases were related, it was difficult to distinguish what was meant to be done, therefore it would be easier if one group was assigned a single case for the duration of the course. It would also be better to have the same individual at the check up and the presentation as conflicting information occurred (for example, advice given during the check up was contradicted by another at the presentation). It was also frustrating for groups that received a case from a previous group as there may be disagreements on how the previous case should have been handled or confusion within a group. It was felt by many that steps 2 and 3 could be combined into one step. The deadlines were also placed oddly, as some were on a holiday and the time between the case submission and the presentation varied based on the case. However, this group work also allowed some to gain more knowledge and have better social experiences with peers.

The different cases were interesting and I gained useful knowledge:

Median: 3.5

The overall consensus was that it would be easier on students to have one case compared to switching as the switching of cases did not allow for deeper learning and the aim of all the cases were extremely similar just with an outcome that fit that specific case, therefore it did not feel necessary to change cases at every step. Some students were frustrated with the group members as they felt more time was spent fixing work done by others than furthering their own learning.

The first computer exercise (SAS) was interesting and I gained useful knowledge:

Median: 4

The exercise was interesting but it would have been more beneficial if students needed to complete some of the exercises on a computer rather than having the lecturer generate the results. As the students were only expected to report on the results, it felt unnecessary to have the lecture where it was shown how these results were generated since that was not required to complete the exercise. Overall, it would be best if the students had to understand how the program worked by actually doing it rather than watching the lecturer do it. It would also be useful to learn programs other than SAS, such as RStudio or Python.

The second computer exercise (DMU) was interesting and I gained useful knowledge:

Median: 4

Similar to the above notes, the lack of doing the exercises without the lecturer made it difficult to understand and confusing. By watching him generate the results, this did not further learning. Coding classes would have been much more useful.

The individual project was well designed (instructions, time schedule)_

Median: 3

The experience of the individual project hinged greatly on the supervisor the students got. The students would have liked to be assigned the supervisor earlier. Those that had less support from their supervisor found that the project could be difficult and that the advice of working on the project earlier could not be done as there were assignments that limited the amount of time one could dedicate to the individual project. Those that had a good supervisor that aided in setting up the proposal and provided examples of papers said that it was good for their learning. All students seemed to agree that the project at the end felt extremely rushed as many felt as though they could not start earlier.

The individual project was interesting and I gained useful knowledge:

Median: 4

Overall, students enjoyed that the projects were not limiting and they could choose the subject of their project. This project felt more useful and improved knowledge, however this was only if the project was different from what was discussed in class. If a project was the same as a case already discussed, it felt unoriginal. The character limitations were strict and some felt that it would be better to allow more to improve the reasoning in the text and more information should be provided on economy as many guessed the cost of their project.

This course has increased my interest in animal breeding and genetics:

Median: 4

This course was repetitive or unnecessary for those that have a strong background in genetics and those that did not found that it was difficult and are not newly motivated after this course concluded.

This course has increased my interest in animal behaviour:

Median: 3

This course did not feel as though it had as much of a focus on animal behaviour in comparison to the breeding and genetics aspects.

This course has increased my interest in animal health:

Median: 3

This course was lacking in lectures dedicated to health. Students felt it would be beneficial to have learned more about diseases in depth.

This course has increased my interest in animal welfare:

Median: 3

This course felt like it was trying to add animal welfare to each aspect but it felt tacked on compared to the lectures focused on genetics. When there were lectures on animal welfare, it was extremely basic and repetitive.

This course has increased my interest for working with research in the future:

Median: 3

This was dependent on the student, however some felt that they really enjoyed reading the literature for both the cases and the individual project.

In this course, I appreciated:

Students appreciated the mix of lectures and the different lecturers as it allowed learning from different individuals. Many agreed that it increased interest when there was choice for the individual project and those that had a good group found it to be super helpful to learn from their peers.

How can the course be improved:

Variation was wanted from the assignments rather than focusing mainly on presentations. Many stressed an interest in having a written exam. More information before assignments would be helpful and the schedule should be revisited. The existing cases and computer exercises felt like they could be altered to better facilitate learning. The main issue many students voiced was that this course felt repetitive in comparison to designing breeding programs. Because of this, many believed that this course would be improved if it were more in-depth in relation to animal genetics.

My tips to the student for next year are:

- Spend time to find an individual project you are genuinely interested in and try your best to start the project early (although starting the project earlier hinges on getting a supervisor earlier and on getting the subject approved)
- Make sure you have a strong background in genetics as if your previous background had minimal courses on this subject, it will feel extremely high level
- If possible, reading the literature is super helpful and interesting