Molecular and microbial ecology
BI1438, 30191.2425

15 Hp
Pace of study = 100%
Education cycle = Basic
Course leader = Aurélien Saghai

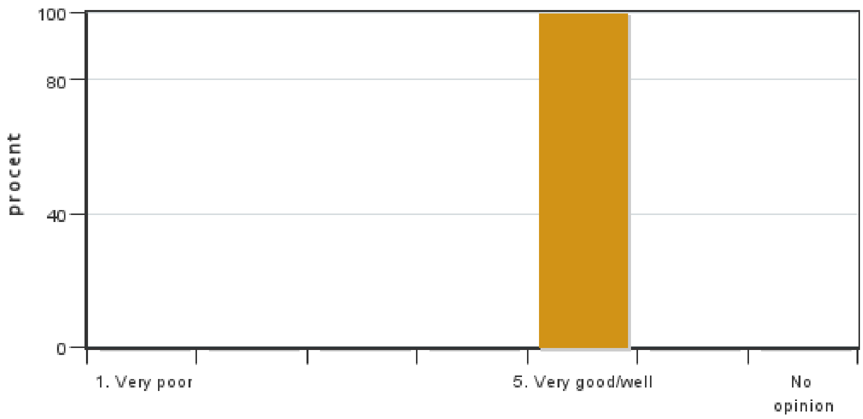
Evaluation report

Evaluation period: 2025-03-13 - 2025-04-07

Answers	4
Number of students	4
Answer frequency	100 %

Mandatory standard questions

1. My overall impression of the course is:

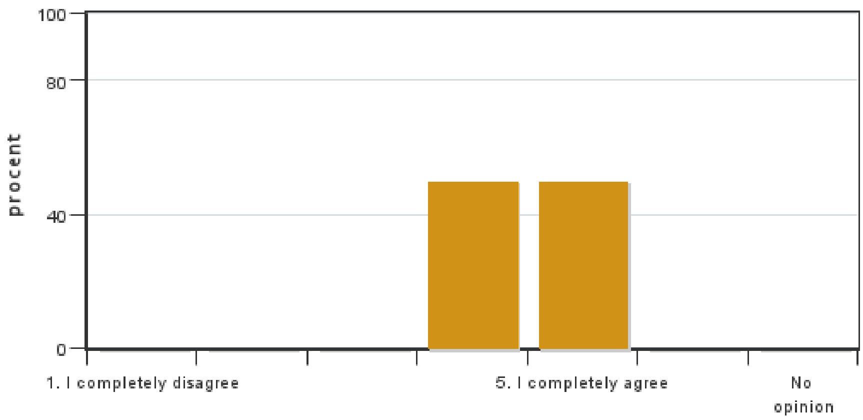


Answers: 4
Medel: 5,0
Median: 5

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

No opinion: 0

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

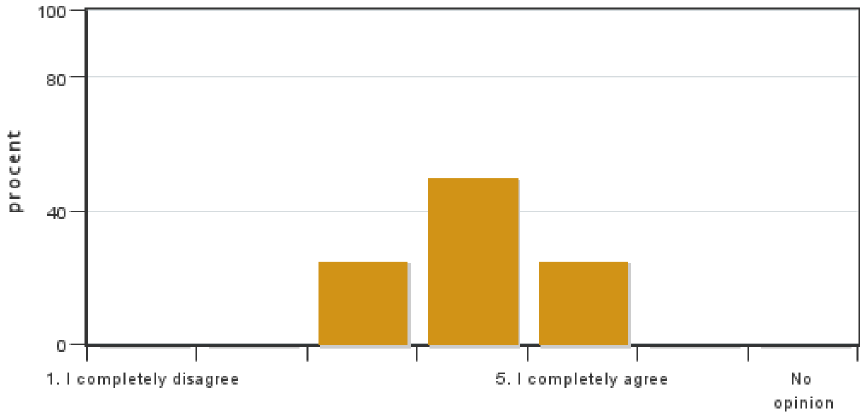


Answers: 4
Medel: 4,5
Median: 4

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

No opinion: 0

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

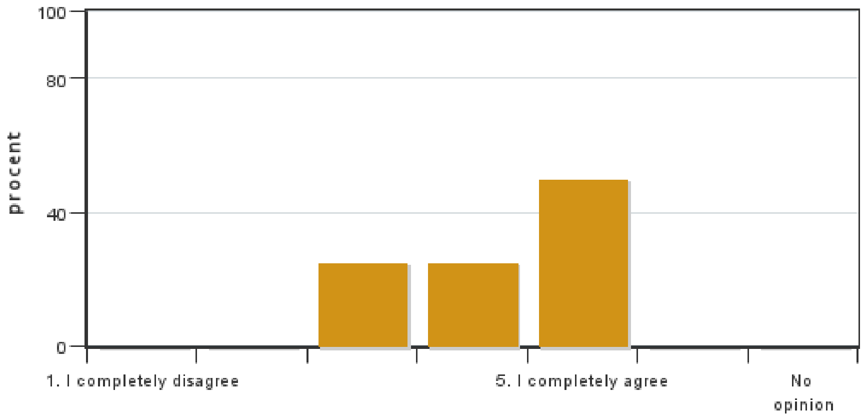


Answers: 4
Medel: 4,0
Median: 4

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

No opinion: 0

4. The information about the course was easily accessible.

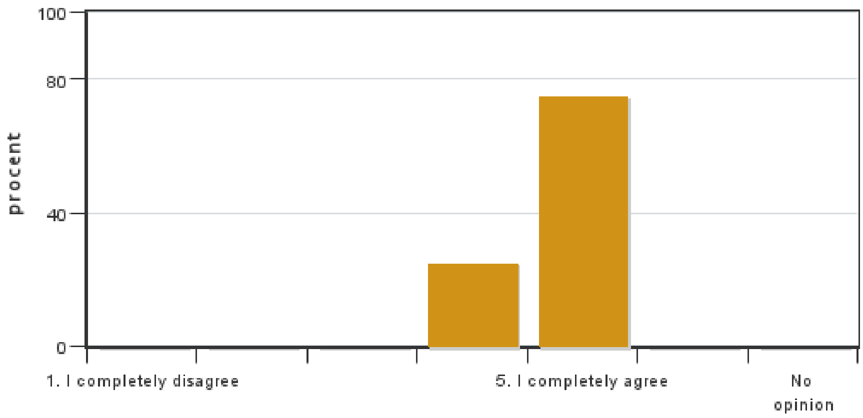


Answers: 4
Medel: 4,3
Median: 4

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

No opinion: 0

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

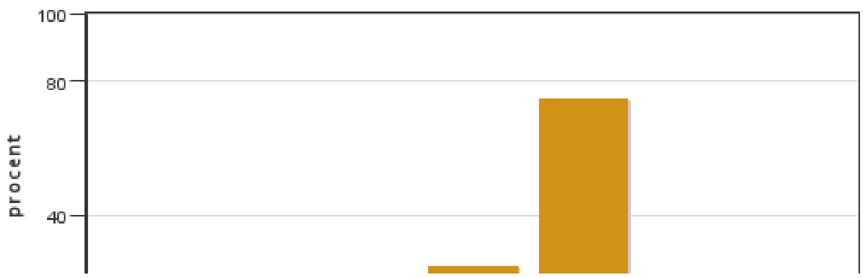


Answers: 4
Medel: 4,8
Median: 5

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

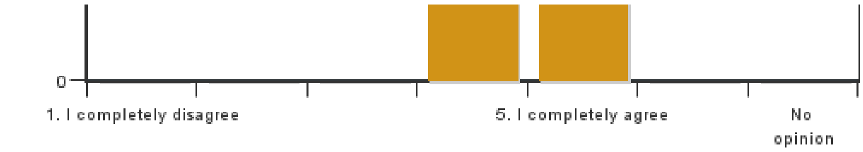
No opinion: 0

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



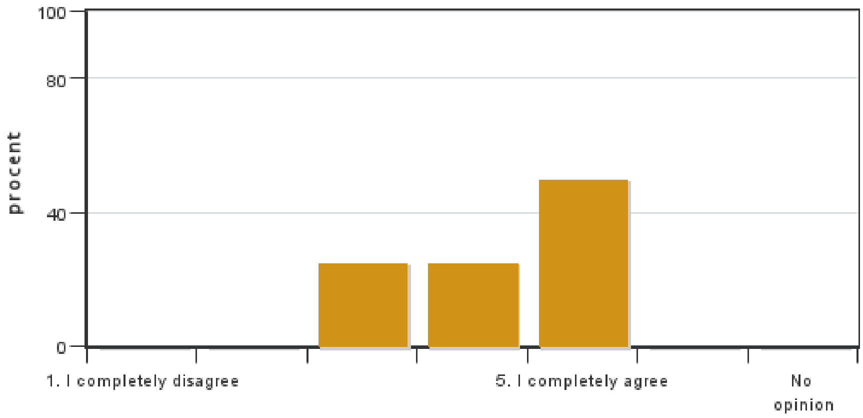
Answers: 4
Medel: 4,8
Median: 5

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



No opinion: 0

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

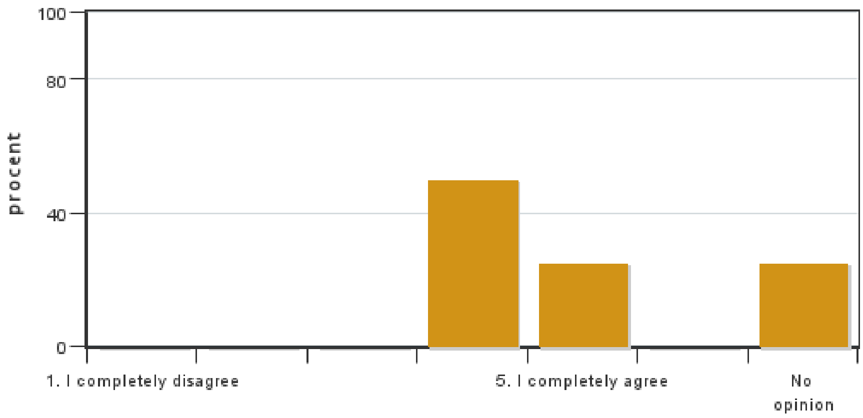


Answers: 4
Medel: 4,3
Median: 4

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

No opinion: 0

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

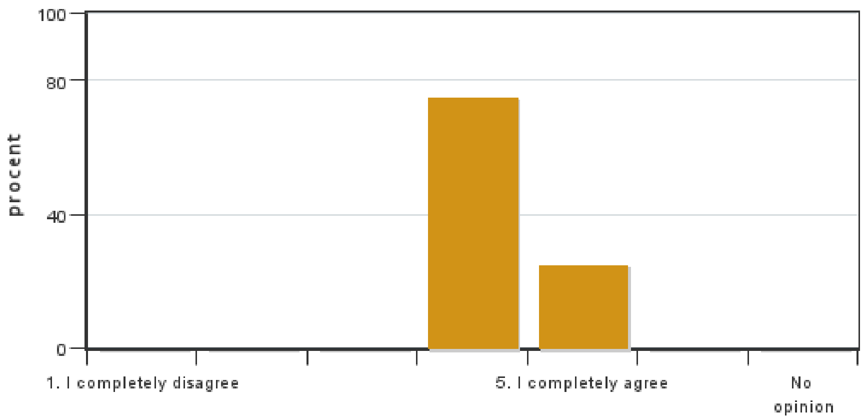


Answers: 4
Medel: 4,3
Median: 4

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

No opinion: 1

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

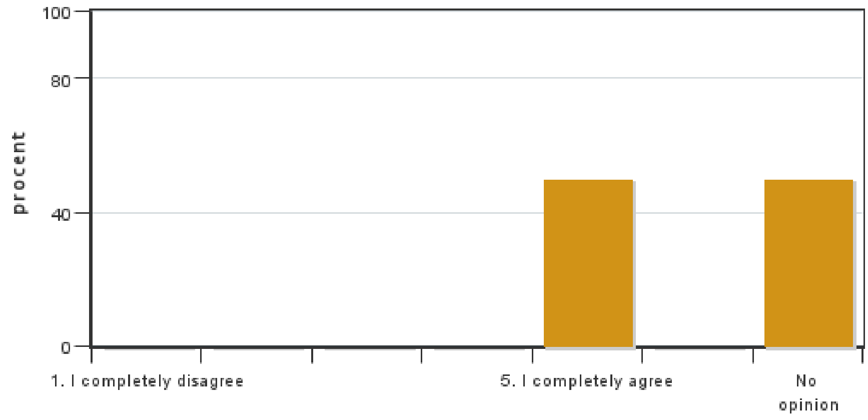


Answers: 4
Medel: 4,3
Median: 4

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

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).

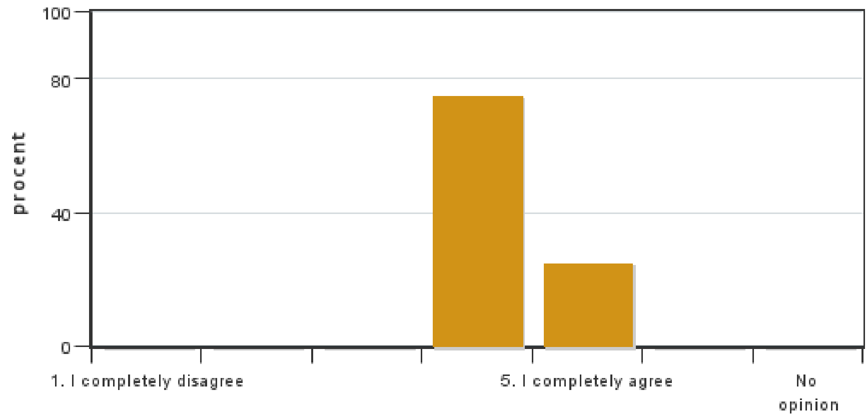


Answers: 4
Medel: 5,0
Median: 5

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

No opinion: 2

11. The course covered international perspectives.

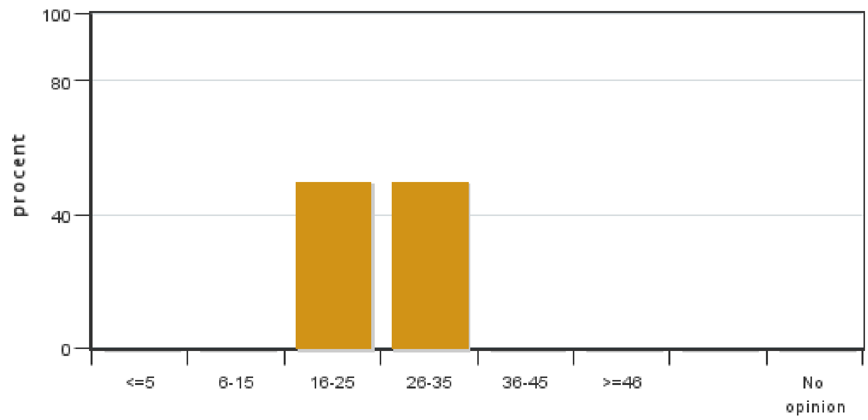


Answers: 4
Medel: 4,3
Median: 4

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

No opinion: 0

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



Answers: 4
Medel: 25,0
Median: 16-25

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

No opinion: 0

Additional own questions

13. Please indicate what you think worked well and what could be improved with the meet-the-author seminars.

13. Comment on the different assignments . For example: were they too easy/difficult? Did you have enough time to complete them? Was the feedback you received from your peers/supervisors useful?

13. What was the level of difficulty of the wet lab part of the course? (i.e. sowing, harvesting, DNA extraction, library preparation and qPCR) Please indicate what you think worked well and what could be improved.

13. What was the level of difficulty of the computer labs? (i.e.sequence processing and analysis, phylogenetics) Please indicate what you think worked well and what could be improved.

13. Would having a short quiz on the protocols prior to the lab help you understand it better?

Course leaders comments

Four students took part in the course and all of them answered the survey. They were a very active group of students, asking lots of questions and attending most lectures.

Overall, the course received a grade of 5 (!), which is fantastic. The students appreciated to have a variety of learning activities (for example: literature review, oral presentation, wet and computer labs, meet-the-author seminars), and felt that the study visits were useful to understand how the concepts presented in the lectures were applied in different contexts. They also indicated that the schedule was well thought and gave them enough time to prepare for the different assignments.

In last year's evaluation the students expressed that the meet-the-author seminars, where students get the chance to read a peer-reviewed article and discuss it with one of the authors, lacked structure. This year they were given a protocol to follow to extract the most important information from an article and the presenters were asked to prepare a few slides to introduce the paper before the discussion. Several students thought that this format worked well.

We also revisited the structure of the method lectures given in the first week, as students found that they were too heavy. These lectures were more interactive and worked well overall, although the students pointed out that having a compendium that they could bring throughout the course would be useful. We think it is a great idea and making a compendium on molecular methods will be one activity in next year's course. We will also make a (ungraded) quiz before each wet lab practical so that the students can reflect on which method they are going to use beforehand and be more prepared.

The computer labs were experienced as being the most challenging aspect of the course. There were technical problems with the computers in the computer room and the phylogeny part hanged a bit loose. We will address these comments in next year's course.

Student representatives comments

All students greatly appreciated the course and rated it very highly (5/5), describing it as well-structured and engaging, with a good balance between lectures, lab work, and assignments. The integration of theoretical knowledge with practical applications was appreciated, both in lab work and excursions.

The meet-the-author seminars were viewed as insightful. While students appreciated the opportunity to try the THIEVES-protocol, some suggested that placing less emphasis on it may improve the flow of the seminars. Clearer author presentations and better timing in relation to other course deadlines were also recommended (mainly for the last seminar).

Students found the assignments clearly structured and appropriately challenging. The project work and lab report were especially appreciated, with supervisors providing helpful guidance and feedback. While the schedule and deadlines were generally well-paced, one student suggested allowing more time for submissions and providing earlier feedback of the lab report (results and discussion sections) to better support their learning.

Lab work was considered a key strength of the course, offering valuable hands-on experience across the full workflow—from plant cultivation to DNA extraction, PCR, and data analysis. Completing all steps independently was seen as highly beneficial for learning. While the overall difficulty level was appropriate and support from teachers was appreciated, it was noted that explanations of molecular methods could be clearer and made more accessible. It has therefore been suggested that the course would benefit from a compendium providing an overview of the key methods (e.g. PCR, qPCR,gel electrophoresis, and sequencing methods). Since there wasn't any course literature, a compendium like this could be a good addition.

Students found the computer labs well-organized and valuable for understanding sequence analysis and phylogenetics, with clear R scripts and helpful instruction. However, they were also seen as the most challenging part of the course, partly due to technical issues such as slow or non-functioning R program on campus computers. Some felt that the phylogenetics module was rushed and suggested allowing it more time, as well as clarifying its relevance to the lab work.

Opinions were divided on the idea of a pre-lab quiz. Some felt it could help them prepare more thoroughly and identify questions early, while others preferred learning through hands-on experience and asking questions during the lab.

The final exam was considered good, as it represented the course material well, had an appropriate difficulty level, and included a few open questions that were challenging in a stimulating way.

One student noted that poor air circulation in the lab and unergonomic chairs in Bio C negatively affected their comfort and concentration. While this falls outside the course's direct responsibility, it's worth pointing out.

Overall, students found the course rewarding and well-organized.