

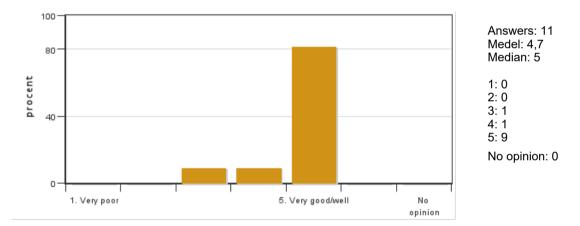
# Forest Ecosystem Ecology BI1369, 20099.2021

15 Hp Pace of study = 100% Education cycle = Advanced Course leader = Paul Kardol

## **Evaluation report**

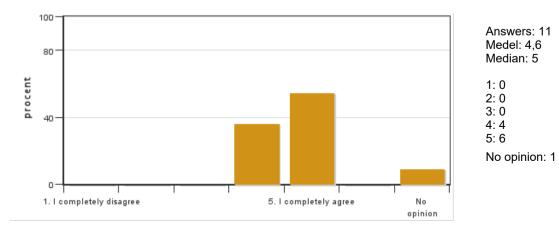
Evaluation period: 2021-01-15-2021-01-31Answers1111Number of students19Answer frequency57 %

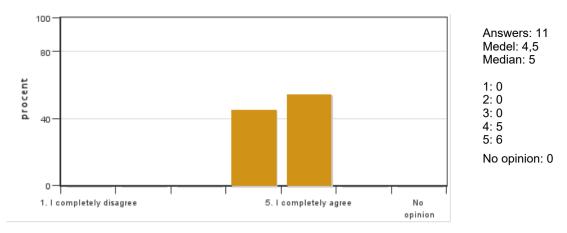
## Mandatory standard questions



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

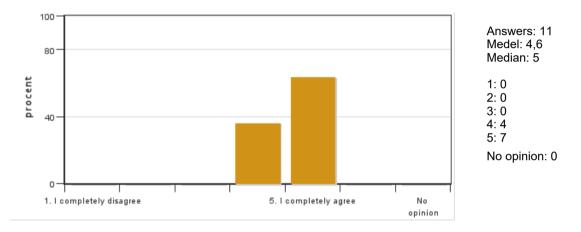
#### 2. I found the course content to have clear links to the learning objectives of the course.



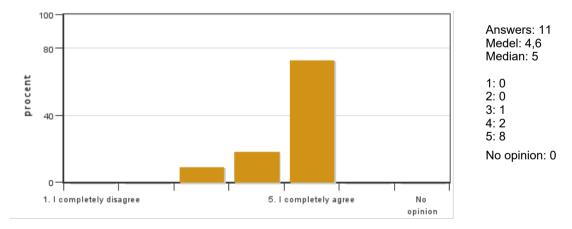


#### 3. My prior knowledge was sufficient for me to benefit from the course.

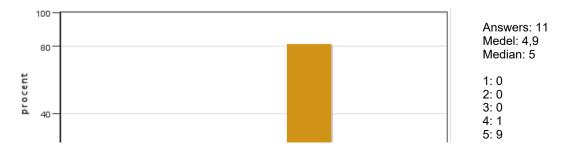
#### 4. The information about the course was easily accessible.

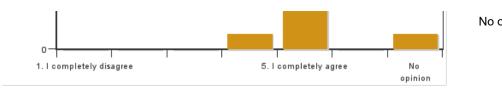


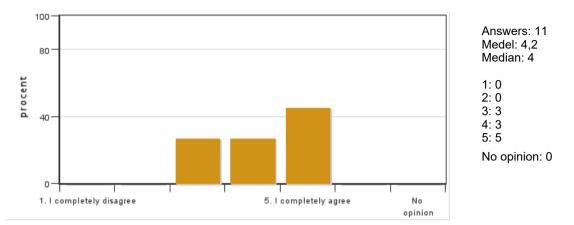
#### 5. The various course components (lectures, course literature, exercises etc.) have supported my learning.



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

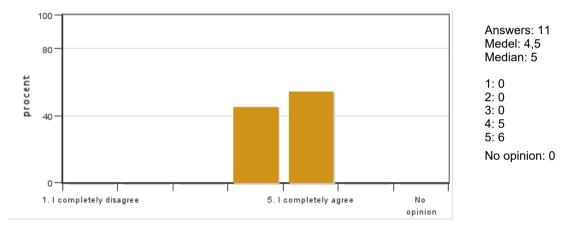




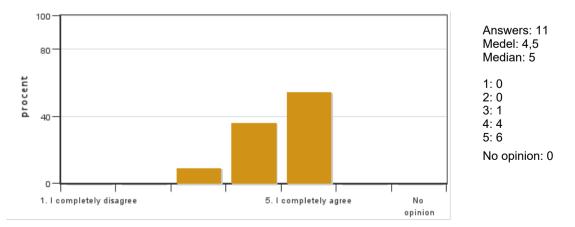


#### 7. The physical learning environment (facilities, equipment etc.) has been satisfactory.

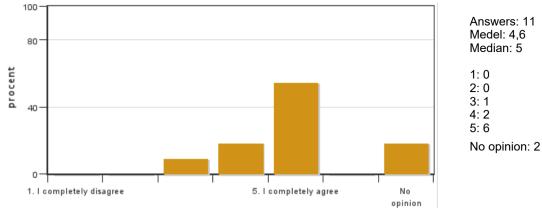
8. The examination(s) provided opportunity to demonstrate what I had learnt during the course (see the learning objectives).



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

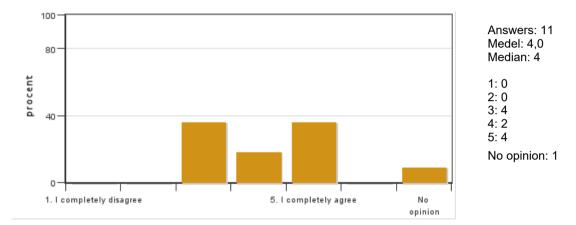


10. I believe the course has included a gender and equality aspect, regarding content as well as teaching practices (e.g. perspective on the subject, reading list, allocation of speaking time and the use of master suppression techniques).

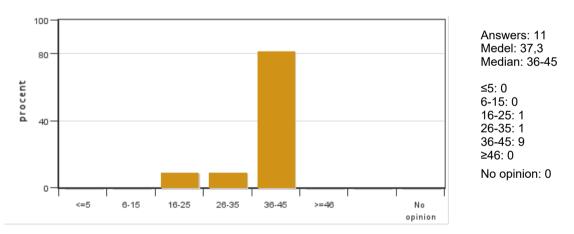




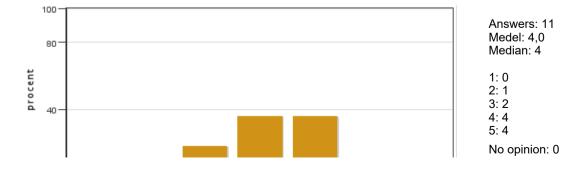
#### 11. The course covered international perspectives.



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



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





#### 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

#### **Course leaders comments**

#### Course leader comments – Forest Ecosystem Ecology (BI1369) 2020-2021

We organized this course for the second time as part of SLU's new MSc program 'Forest Ecology and Sustainable Management'. The course was attended by 19 students of which 11 submitted the evaluation report (= 57%).

We started the course on-campus, but after the second week we changed to distance teaching by Zoom. Only the already-started Group Projects were run on campus also after the second week with some groups meeting in person once a week, while other groups mostly met on Zoom and only came to campus for greenhouse or lab work. Student attendance of the (Zoom) lectures and other activities was generally very high, even though we could not make any parts of the course mandatory. Distance teaching, however, clearly is challenging, both for teachers and for students. And most students very much prefer on-campus teaching. Extra efforts by some teachers who adapted their lectures to Zoom were much appreciated.

Overall, the students are very positive regarding the administration, organization, social learning environment (even by Zoom), and equality aspects.

The 'module structure' was generally very much appreciated, with one remark that the workload was not always equally divided among the modules with some modules much 'heavier' than others. Specifically, the Biogeochemistry module is too 'heavy', while the Microbial module is maybe a bit too light. Based on the comments, we will make some changes to these modules, finding a better balance, and also making a smoother transition between biogeochemistry and microbial ecology. Further, one student thought that towards the end of the course the more integrative modules were too blurry. Here, we should do better job in explaining how the previous modules feed into the subsequent modules.

The accessibility of information (CANVAS) was also very positively evaluated. Also for us as course leaders, the use of CANVAS as information and communication platform works great. Some other teachers though are still not familiar with CANVAS which creates more work for the course leaders. We will further encourage (and, where possible, force) all teachers to use CANVAS for all information distribution and assignment instructions (+ submissions) and feedback.

Given the diverse background of the students, it remains a bit of a challenge to find the right starting level. But, with one or two exceptions, the level of the course fitted well to the student's background knowledge. Some students preferred some topics (lectures, modules) more than other topics (lectures, modules), but that is inherent to the broad scope of the course and the diverse interests of the students. We will inform all teachers to make sure that the topics which are also taught on the basic level courses are advanced in our course (for example, not giving the same lecture as on a third-year course).

Although it is a rather busy course (we were aware of this), the work load has been evaluated as appropriate. The students spent, on average, about 36-45 hours on the course, which corresponds well to a normal work week. However, we need to make some changes to the module structure so the work load is a bit more equally distributed.

The examination system (i.e., module by module) has been evaluated positively, allowing a broad range of examination forms and taking away the unnecessary pressure of a final exam. So, we will keep this in future years. Also, the very diverse set of assignments during the different course modules is generally appreciated by the students. So, no large changes or new assignments are necessary.

Not all students read the book chapters, but those who did felt the chapters were mostly useful. The same for the additional scientific papers. We will keep the book chapters and we will keep updating the additional papers.

The students liked the Group Projects (= experiments), and were all very happy with the guidance and support of their group leaders. Some students felt that there was not enough time for data analyses and writing the final report, while others thought that there was enough time. This is likely partly because the allocation of time to experimental design, data collection, data analyses, and writing varied a bit among the projects. The overall workload, however, was about the same for all projects. Every year there will be some new projects (largely depending on the availability of group leaders), and we will make sure that all group projects will be comparable with regards to learning

objectives, work load, and learning outcomes.

The introduction to data analysis using R was very positively evaluated. Definitely a keeper, but if the number of students in the class remains similar (15+) in the following years, we will allocate one more teaching assistant to the R labs to make sure that all students who need help will get it.

Paul Kardol & Lenka Kuglerova – Course leaders

### **Student representatives comments**

#### 11 of 19 students answered this survey, a 57% participation.

The students commented that Paul and Lenka were the 'best thing about this course' and request that they continue to be the course leaders in upcoming years. The students highly valued this course for the variation in assignment, structure of the modules, and overarching group project.

Many students noted that although nothing compares to in-class teaching, the course leaders handled the transition to online very well and made the online teaching interactive and as good as an alternative as the times allow. All 11 surveyed students agreed vehemently that teaching both terrestrial and aquatic ecology was worthwhile.

#### Some specific positive feedback from the students about the course include:

- Course leaders were effective in welcoming everyone's ideas and inputs and were always open for discussion.
- 'Lenka was very good at creating and managing discussions, and her attitude made this course enjoyable.'
- Menti.com was an engaging platform.
- Distinguishing the class into weekly modules is an efficacious method for learning.
- Teaching both aquatic and terrestrial ecology was highly valued.
- Working with real data for the R work was appreciated.
- The group projects facilitated learning, especially regarding COVID (provided interaction in small groups) and in preparation for the master's thesis.
- Lenka is 'excellent' at introducing the students to, and clear with instruction for, R.
- Found the required textbook and scientific paper reading enjoyable.
- **Positive aspects of working online:** 5–15-minute breaks, fun and engaging assignments, independence, menti.com, short movies, use of breakout rooms. Some students felt like it was more convenient to be on Zoom.

#### Some specific constructive feedback from the students about the course include:

- The Biogeochemistry week was stressful, challenging, and could be restructured: it was expected to take the weekend to finish the assignment and students found that unreasonable.
  - Students suggest more time or a less demanding assignment for this module.
- Hard to prepare ahead for modules without them being opened beforehand in Canva.
- Make the R work more evenly distributed: for example, R could have been used more in modules that used Excel.
- Some students did not learn as much as they had hoped particularly for those taking the jägmästar-program the course content was akin to previous 'Forest Ecology' course content.
  - A suggestion to improve this from a student is: 'ask who took the Forest Ecology course... and build on the knowledge of the students.'
- Some assignments took much longer than others whilst getting the same weight.
- It became unclear how later modules were supposed to tie into earlier modules from the course.
- **Difficulties of learning online:** Computer labs for R were difficult, it was harder to get direct assistance from instructors, and some students experienced depression. Students do not prefer learning online to learning in the classroom and feel like when the pandemic is over this course would be best held in-person.
  - Several students mentioned it would be beneficial to have a class tutorial on how to use Zoom and on computer equipment working properly so students do not go through the entire course with improperly functioning equipment.

For the course-long project: Students felt it would be nice to receive feedback earlier on the report so we could learn and improve, specifically:

'an earlier deadline for the first draft and serious comments followed by another week of writing'.

'after report completion other students could 'peer-review' the writing, to give perspective on how others write and how they compare'.

Most students felt like there was enough time to complete the group project but felt like they could write a better report with more time. Overall, the students found the group projects to be useful and the students were happy with the level of presence and feedback from project leaders.

The overall impression of the course was 'very good' with one of the students mentioning it was one of the best courses so far in their program. Students felt that the instructors were 'positive, present, and inspiring' and provided clear and consistent feedback. Students found the assignment structure and module layout to be creative, engaging, and appropriate for all learning styles. Paul and Lenka are lauded by the students for their furtive effort in adapting to the online structure and made this a worthwhile class.

Kontakta support: <u>support@slu.se</u> - 018-67 6600