

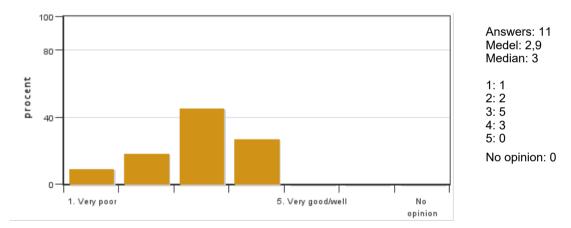
# Soils of the world and sustainable water and soil management MV0215, 10206.1920

15 Hp Pace of study = 100% Education cycle = Advanced Course leader = Erik Karltun

# **Evaluation report**

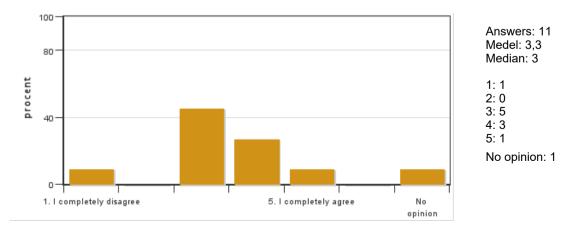
Evaluation period: 2019-10-24-2019-11-14Answers11-Number of students18Answer frequency61 %

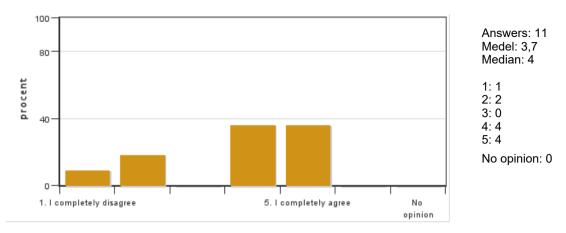
# Mandatory standard questions



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

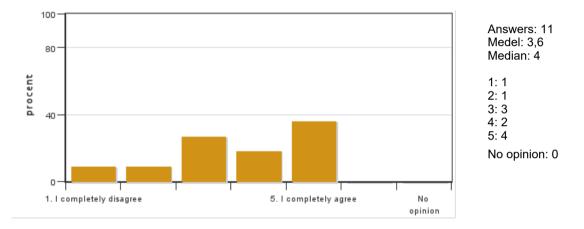
#### 2. I found the course content to have clear links to the learning objectives of the course.



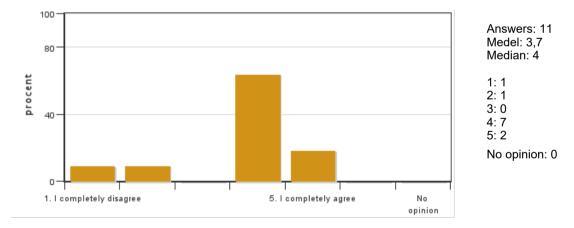


#### 3. My prior knowledge was sufficient for me to benefit from the course.

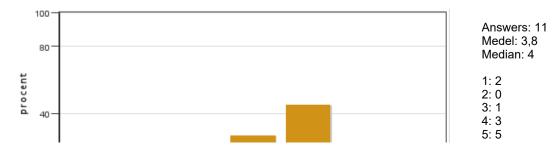
#### 4. The information about the course was easily accessible.

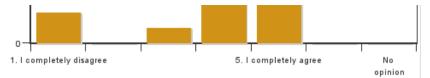


#### 5. The various course components (lectures, course literature, exercises etc.) have supported my learning.

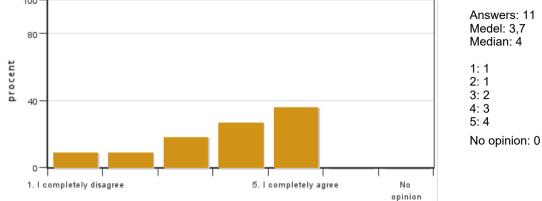


#### 6. The social learning environment has been inclusive, respecting differences of opinion.



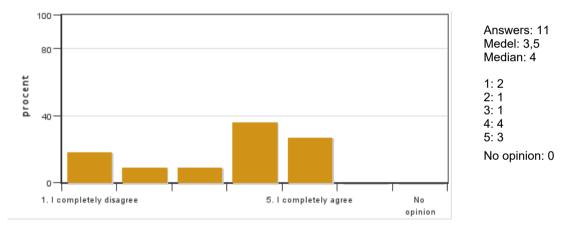


No opinion: 0

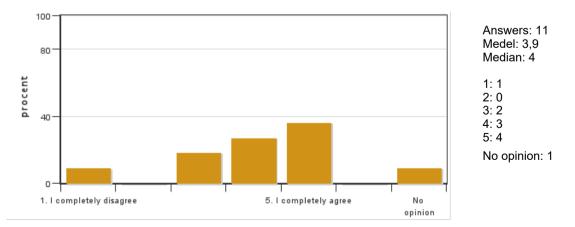


## 7. The physical learning environment (facilities, equipment etc.) has been satisfactory.

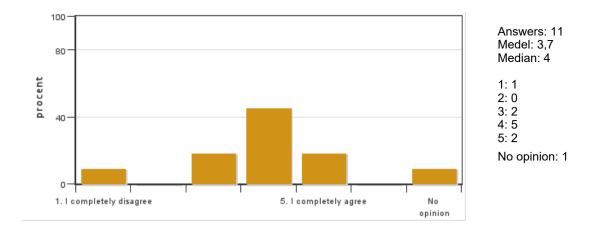
8. The examination(s) provided opportunity to demonstrate what I had learnt during the course (see the learning objectives).



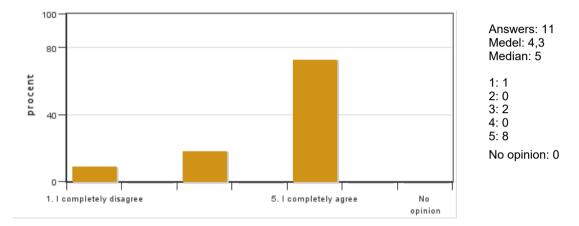
### 9. The course covered the sustainable development aspect (environmental, social and/or financial sustainability).



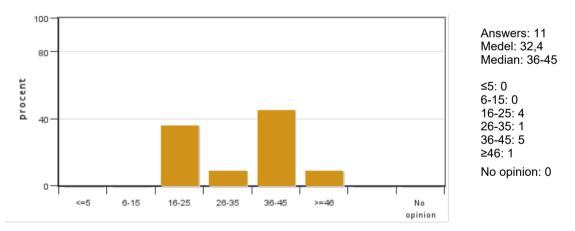
10. I believe the course has included a gender and equality aspect, regarding content as well as teaching practices (e.g. perspective on the subject, reading list, allocation of speaking time and the use of master suppression techniques).



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



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



## **Course leaders comments**

Teacher's reflection on the course evaluation

Course evaluation has been made through two different means. An oral course evaluation with the whole course was held on October 31 and students have also done an on-line course evaluation.

During the oral course evaluation the students were asked to highlight things that was good and things that could be improved.

The students appreciated:

• The field trips (excursions)

- The applied assignments
- The project work on the water and land management part, particularly;
- the time allocation was sufficient
- the availability of teachers was good
- the guidance was constructive
  - That the two course parts had separate exams
  - Breakdown of soil (from small to larger scale)
  - Hydrology equations availability
  - The soil map exercise: Interesting, but time consuming and hard to find data

#### What can be improved?

- The calculations, (students should not be left to figure out how to solve the calculations, especially the Et and Eo part).
- Missing equations
- Guidance for assignments
- Introduction of assignments
- Scheduling before exam
- Time distribution more time to study the soils of the world exam
- Questions couple of days before the exam

#### Teachers comments:

From a general point we interpret the opinions above as a satisfaction with the content of the course but a dissatisfaction regarding some aspects of how the course was executed. We agree with the students that the time planning of the course could be improved giving the students more time to study before the first exam. The reason the schedule became a bit tight was that we let the students participate in the two day conference Agri4D. We believed that the conference would give the students a valuable context to the course and a possibility to meet and discuss with researchers. This was not part of the original schedule and was accommodated by moving other course parts without removing anything. The problems associated with different assignments is mostly dependent on the difficulties for teachers to identify were the difficulties in an assignment and the variation in students background. Note that the assignments equal 1 -1.5 hp : therefore there is an expectation that students should carry out more work that the schedule 1-4 hr instructions and facilitated exercise (eg no 1, 2,)

There was always support provided if students asked outside of scheduled lecture or practice time also for assignments

. Based on this year's experience, we will continue to develop the assignments for improved learning. Some assignments will be updated and more effort will be put on communicating expectations of effort for assignments .

#### On-line course evaluation

• The overall impression of the course: Average 2.9

#### Teacher's comments:

We are not satisfied with this rating – we have higher ambitions than that. The course has undergone a generational shift when the responsible teachers have been changed due to retirement or change of duties. The course is therefore in a transitional process and most teachers were new to the course. Next year we will build on the experiences from this year and improve, and put extra effort into further integrate section Soils of the World and the part on Sustainable water and soil management through developing the project module .

1. Clear links to the learning objectives of the course: Average 3.3

#### Teacher's comments:

We find this rating expected. There is apparently one student who is very knowledgeable in the area and did not learn much. However, the overall results and performance of students during the course do not suggest that the course were at a too low level.

• Prior knowledge of students sufficient for the course: Average 7

#### Teacher's comments:

The comments go in different directions here, which reflect that students come in to this course with very different backgrounds. As teachers, we see that there was a great disparity in students' performance which makes it difficult to design appropriate course content and exam forms to suit the heterogenic back ground of students, . However, the diversity also brings peer learning into sessions especially during project work.

1. Information about the course accessible: Average 3.6

#### Teacher's comments:

We can only agree with the students comments. The course leader used Canvas for the first time so it took a while to get into it.

• Various course components have supported my learning: Average 3.7

#### Teacher's comments:

We think the answers confirm that the course has a good mix of different ways of learning and that the problem is more on how they are executed. Again one student is very critical but most students are satisfied.

• The social learning environment has been inclusive, respecting differences of opinion Average 3.8

#### Teacher's comments:

We are positively surprised about the rating in this question since there was some frictions in the student group during the course. However, there is some criticism here that we take seriously.

• The physical learning environment has been satisfactory Average 3.7

#### Teacher's comments:

We can agree with most of the students' comments. We should have informed students about the need of computers or other necessary preparation or learning tools required..

• The examinations provided opportunity to demonstrate what I learnt. Average 3.5

#### Teacher's comments:

This is not a satisfactory rating. Both exams get critical comments here and we will look into what the problem is. Note that exams are only one measure of learning progress, and a multiple approach to assessment is used and weighed into final grading

• The course covered sustainable development perspectives. Average 3.9

#### Teacher's comments:

Here we think that we are approaching acceptable ratings. We spent quite some time to get sustainability issues reflected in the introductory lectures and e.g. by offering students to participate in the Agri4D conference. Of course – one can have different opinions and problematize the concept of sustainability – and we hope that we contributed to that. The comment on the economic sustainability is appreciated. We will look into that.

• The course covered international perspectives. Average 4.3

#### Teacher's comments:

Finally an average grade of more than 4! To be expected from a course about soils of the world. Still one rating is at

- 1. Some are difficult to please.
  - On average I have spent.... hrs/week on the course

#### Teacher's comments:

The student group here is divided between one group that spent around 40h/week and one group that spent considerably less. It confirms the impression that we have that students come to this course with very varying amount of experience. It would be difficult to increase the workload.

• I believe that the course has included a gender and equality aspect, regarding content as well as teaching practises. Average: 3.7

#### Teachers comment:

Most students seems quite OK with this aspect. We have spent very little time actually conscientiously working on this.

#### General comment:

The overall impression of the course – the first question - had the lowest rating of all categories – i.e. on all other aspects of the course. This is a bit unusual. That to us indicates that we need to work on making a more coherent course with a clearer structure where each component feels motivated.

# Student representatives comments

The course soils of the world and sustainable water and soil management was received with mixed feelings. This commentary is not only based on the online course evaluation but also the evaluation in the class and conversations with fellow students. For the overall impression the average score was 2,9. Most parts of the course were good but some other parts will need some improvement.

#### Good aspects of this course

- Field trip
- Separate exams for soils of the world and sustainable water management
- Soil profile description lectures
- Horizon determination in the field and lectures
- Applied assignments
- AGRI 4D conference
- Project; time and guidance
- · Lectures and assignments on soil erosion

#### **Neutral impressions**

- · Availability of equations for the different parts
- Soil map of the world assignment; especially data was hard to find
- Level of the exam; soils of the world exam was seen as difficult and the water management exam as easy
- Since most students have a different background the knowledge on especially agronomy was sometimes overestimated

#### Improvement points

- · Scheduling especially in the week before the exam
- Question time before the exam
- Guidance during the assignments
  - · Some simple examples in the lectures would be appreciated
  - Clearer statement about what is expected
- Introduction before the assignment
- Time needed to grade assignments
- Extra task for students that missed mandatory parts
- Levelling exercise

#### I found the course content to have clear links to the learning objectives of the course. (3,3)

In general students agree with this but some hoped for a bit more depth since it is a master course. Especially for students with a background in soil science or water management a bit more depth would have been welcome.

#### My prior knowledge was sufficient for me to benefit from the course. (3,7)

Among students previous knowledge differed a lot. Some had a background in soil science while others in water management, some not at all. Students with a background in one of or both of them thought some parts were (too) easy but students without thought some parts were (too) difficult. Also the level of agronomy of students was overestimated. For the project knowledge of GIS was necessary but not everyone has done this before. Maybe a crash-course in GIS would be a good idea.

#### The information about the course was easily accessible. (3,6)

The information was easily accessible. Canvas was well structured. Assignments could have been earlier accesible. If information, lectures or assignments were not available the teachers were quickly responding. It would have been nice to know when a laptop was needed for assignments or tasks or book a computer room instead next year.

#### The various course components (lectures, course literature, exercises etc.) have supported my learning. (3,7)

For most the mix of applied assignments, field work and lectures were seen as helpful. Especially the horizon classification, field excursions and exercises in class helped create a better understanding on the soils part. The applied assignments for the water part were good but need improvement, also the levelling in the field needs to be improved. There were some problems accessing the course book for the water management part. The project learned us to put what we learned this course into practice.

#### The social learning environment has been inclusive, respecting differences of opinion. (3,8)

There are mixed feelings about the social learning environment among students. In general everyone was included and involved during the class. Most of the time pretty much everyone was present whether it were lectures, assignments or field work. In the social learning environment were some tensions. Some students did not attent some of the mandotory parts and still passed the course, for students always being there this seemed really unfair. For next year maybe come up with an extra assignment for these students. Also during the assignments and project work there were some tensions. Some students also thought it was hard to ask help to some of the teachers.

#### The physical learning environment (facilities, equipment etc.) has been satisfactory. (3,7)

There were not really facilities that were needed. Presentations could have been done in a better room also assignments preferably in a computer room.

# The examination(s) provided opportunity to demonstrate what I had learnt during the course (see the learning objectives). (3,5)

There were two exams and also the assignments were graded. So there were plenty of opportunities to show what you learned during the course. The soils of the world exam was seen as difficult in comparison to the water management exam. In the assignments we could show the practical side and in the exams the knowledge we gained. Some questions on both exams were a bit unclear.

# The course covered the sustainable development aspect (environmental, social and/or financial sustainability). (3,9)

The sustainable development aspects were discussed during the course. Also during the conference AGRI4D Zero Hunger, sustainable development aspects were discussed. We had to also do some critical thinking if some of the goals or measures were actually sustainable. During the project we also had to do some thinking on the financial side. It would have been good to have a lecture on livelihoods to get a better understanding of the social and financial part of this course.

#### The course covered international perspectives. (4,3)

The knowledge of the teachers is globally but most of the knowledge is on African soils. During the course we discussed a lot of African soils but also Asian, Southern American and European soils. So there were plenty of international perspectives and come on the course is called soils of the worlds!

#### On average, I have spent ... hours/week on the course (including timetabled hours). (36-45)

The scheduling of the course was seen by most as a fundamental problem. This caused a big variation in intensity during the different part. Before the soils of the world exam there was barely time to study. Also background knowledge played a part in how long students studied for exams. Assignments took longer than most students expected. Some changes to the schedule were made in agreement with the students.

# 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). (3,7)

There seemed to be a well balance overall.

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