

Geographic information systems for engineers TE0018, 20103.2122

5 Hp Pace of study = 35% Education cycle = Advanced Course leader = Anders Larsolle

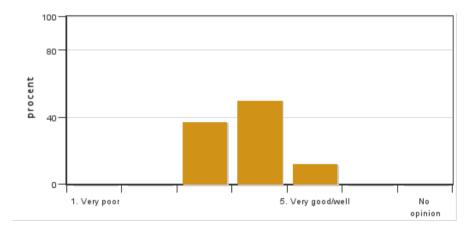
Evaluation report

Evaluation period: 2022-01-09 - 2022-01-30

Answers 8 Number of students 42 Answer frequency 19 %

Mandatory standard questions

1. My overall impression of the course is:



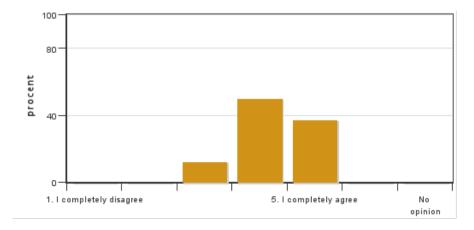
Answers: 8 Medel: 3,8 Median: 4

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

5: 1

No opinion: 0

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



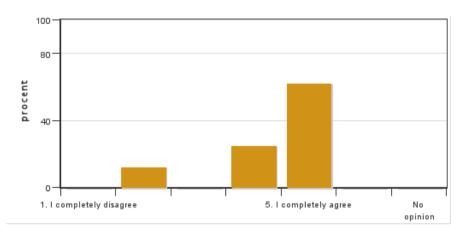
Answers: 8 Medel: 4,3 Median: 4

1: 0 2: 0 3: 1

3: 1 4: 4 5: 3

No opinion: 0

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



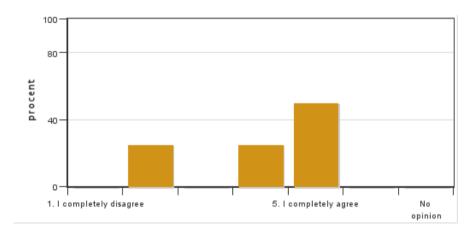
Answers: 8 Medel: 4,4 Median: 5

1: 0 2: 1

3: 0 4: 2 5: 5

No opinion: 0

4. The information about the course was easily accessible.



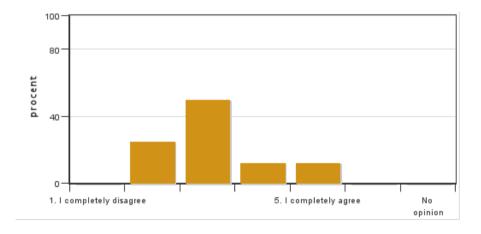
Answers: 8 Medel: 4,0 Median: 4

1: 0 2: 2

3: 0 4: 2 5: 4

No opinion: 0

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



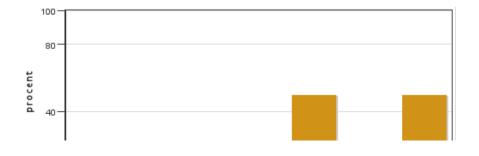
Answers: 8 Medel: 3,1 Median: 3

1: 0 2: 2 3: 4

4: 1 5: 1

No opinion: 0

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

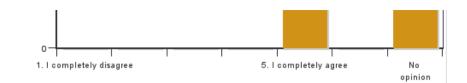


Answers: 8 Medel: 5,0 Median: 5

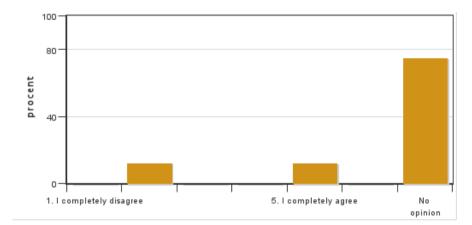
1: 0 2: 0

2: 0 3: 0 4: 0

5: 4



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

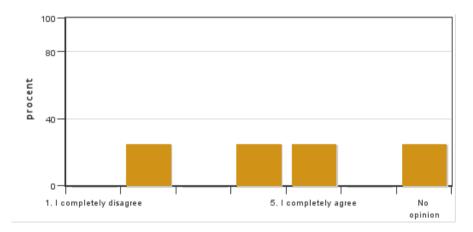


Answers: 8 Medel: 3,5 Median: 2 1: 0 2: 1 3: 0 4: 0

5: 1

No opinion: 6

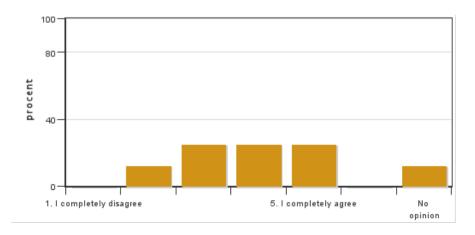
8. The examination(s) provided opportunity to demonstrate what I had learnt during the course (see the learning objectives).



Answers: 8 Medel: 3,7 Median: 4 1: 0 2: 2 3: 0 4: 2 5: 2

No opinion: 2

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

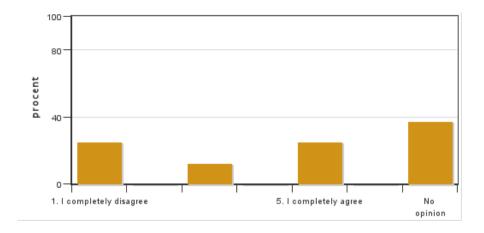


Answers: 8 Medel: 3,7 Median: 4

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

No opinion: 1

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).



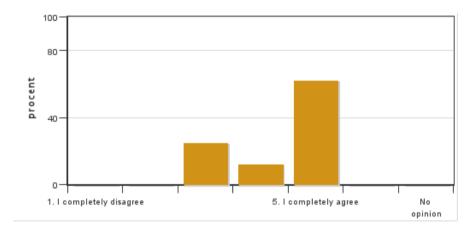
Answers: 8 Medel: 3,0 Median: 3

1: 2 2: 0

3: 1 4: 0 5: 2

No opinion: 3

11. The course covered international perspectives.



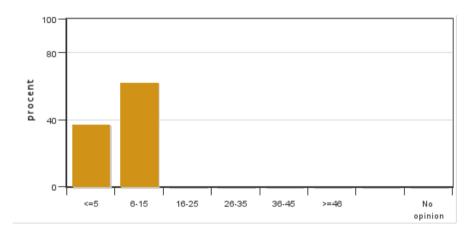
Answers: 8 Medel: 4,4 Median: 5

1: 0 2: 0 3: 2

3. 2 4: 1 5: 5

No opinion: 0

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

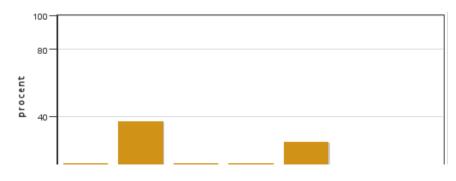


Answers: 8 Medel: 7,2 Median: 6-15

≤5: 3 6-15: 5 16-25: 0 26-35: 0 36-45: 0 ≥46: 0

No opinion: 0

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



Answers: 8 Medel: 3,0 Median: 2

1: 1 2: 3

2: 3 3: 1

4: 1 5: 2

No opinion: 0

- 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

This year's teaching has again been very special with distance learning necessitated by the Covid pandemic. The GIS teaching team, which shares a long-time pedagogical interest, has done its best to adapt its pedagogical approach to the current situation and is generally enthusiastic regarding the effectiveness of the resulting teaching, and also regarding the generally positive response from the students. It feels as if the pandemic has offered an incentive for change that was needed anyway, and as if a new era has been entered with the shift towards increasing posibilities for students to participate independently of their physical location.. We doubt that anyone wants to return to traditional in-house teaching after these new experiences.

The pre-recorded video lectures can be provided at the pace that the students themselves choose no matter who or where they are. As a follow-up to the video lectures, we have introduced a new teaching element where we meet live on-line to discuss the content of the lectures. At these meetings, we can focus entirely on deepening the discussion regarding the topics that the students themselves address. In addition, project guidance becomes easier to access live on-line, where supervisors even can take control of project team computers to demonstrate management and functionalities of complex software. The extensive practice that characterizes GIS teaching has been provided online for more than ten years now. As an interested educator, it is stimulating to be involved in the creation of a new teaching paradigm. As part of the pedagogical method, it is of course particularily important to evaluate the results in order to learn and adjust the new method of on-line education. The educational element that we do'nt wish to perform on-line has turned out to be the written exams, these are better provided on-site in physical lecture halls.

Student representatives comments

The course Geographic information system for engineers (GIS) **TE0018** was given during the fall of 2021. The course has a answer frequency of 19% (8/42) which has to be taken in consideration when reading this course evaluation.

The course was preformed online, with a majority of pre-recorded lectures in video-format. The excersises (both hand-in assignments and ESRI-excersises) where preformed individually by the students and could be preformed whenever the students had time. This way of working seems to be appriciated by the students, many students mentions the exercises as this course's strong side. The course had scheduled guiding opportunities, where the teacher was able to answer questions from the students over zoom. The teacher was also very helpfull and answered emails quickly which was highly appriciated by the students!

The exam was written at the end of the course. The general opinion about the exam is that maybe this course could benefit from removing the exam/re-make the format a bit. Since this is a course where we use a (to many at least) new programme, perhaps the best way to test the students knowledge is to keep the examination form of exercises and hand-ins, and remove the written exam. This could be taken in consideration to next years course.

Another thing worth mentioning is the structure of the pre-recorded lectures. These where informative and it seems like the students appriciated the fact that we could access them whenever we wanted. However, they where very time-demanding and some of the material was discussed unneccesary long. To next year's course, the videos could be edited to more time efficient and only include the most essential.